The Road to Yesterday — CHAS. W. TYLER

RAILROAD STORIES

FEBRUARY 15¢

ALL COMPLETE

The Great Strike of 1877

by

H. R. EDWARDS

Wouldn't you like to get thru the winter *without* CATCHING COLD?

Your chances of doing so are better if you will treat a cold for what it is — an infection calling for germicidal action

SOMETHING new is going on—something that will interest you if you are subject to colds and sore throat.

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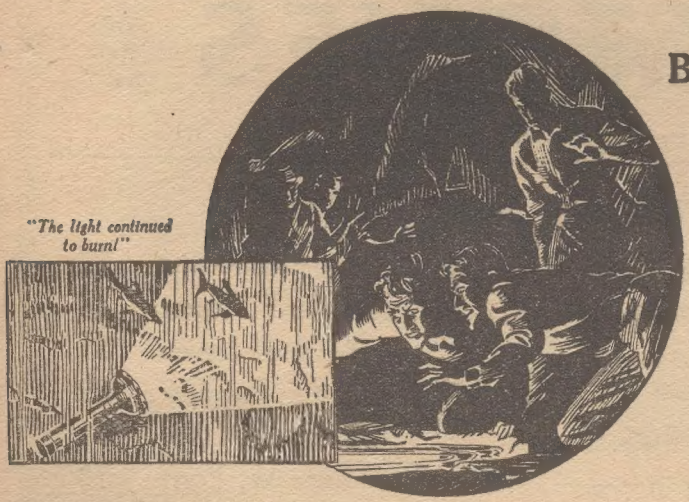

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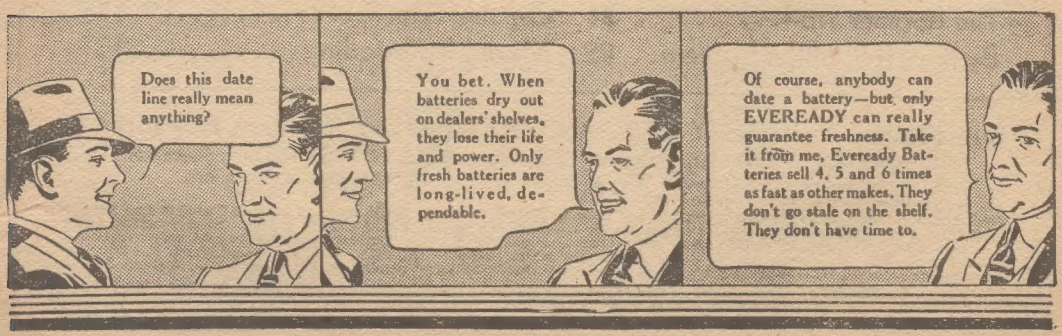
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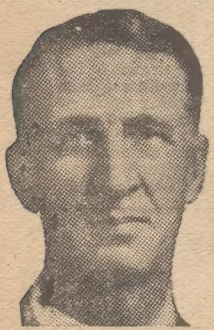

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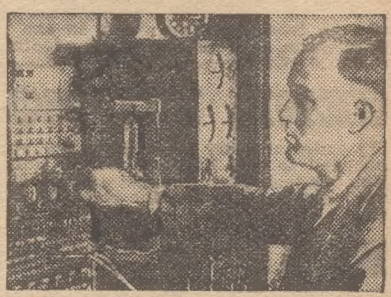

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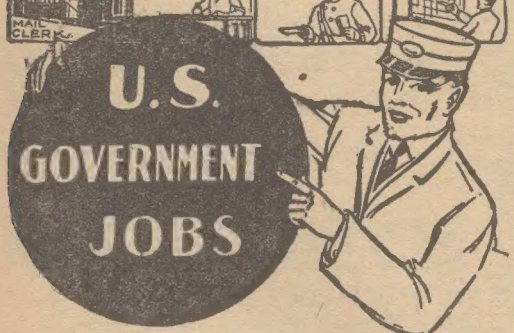

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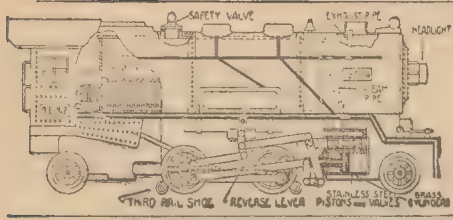

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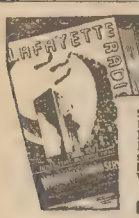

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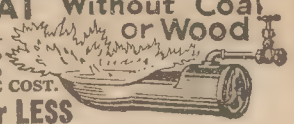

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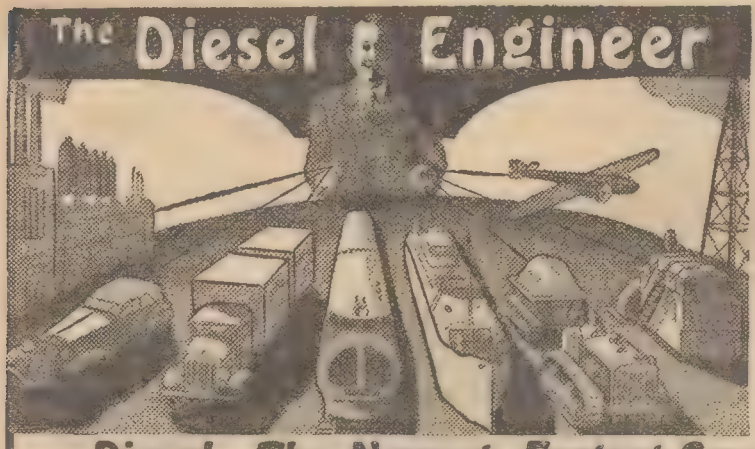

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Troops " Defending Themselves " Against Strike Sympathizers at Erie Depot, Susquehanna, Pa.

The Great Strike of 1877

By H. R. EDWARDS

Author of "The Wreck at Spuyten Duyvil," etc

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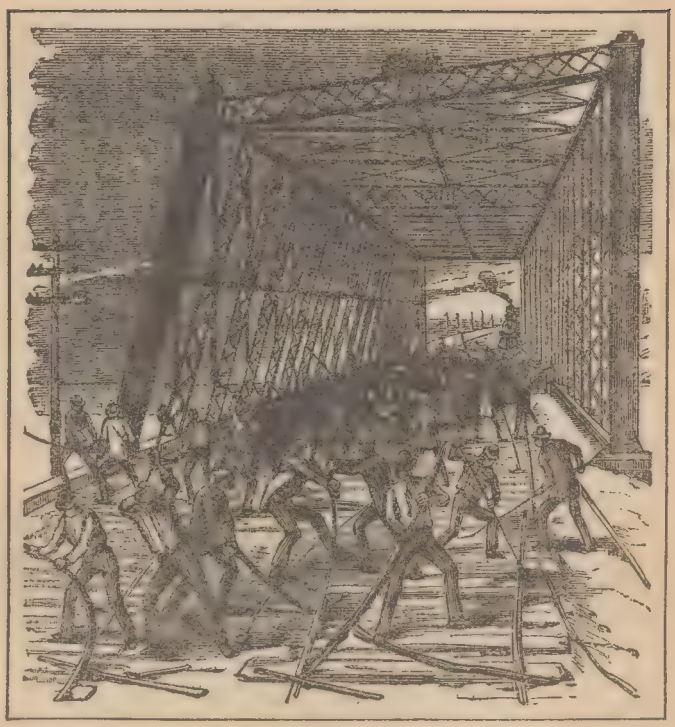


Rioters Tearing Up the Rails on the Lackawanna Bridge at Corning, N. Y.

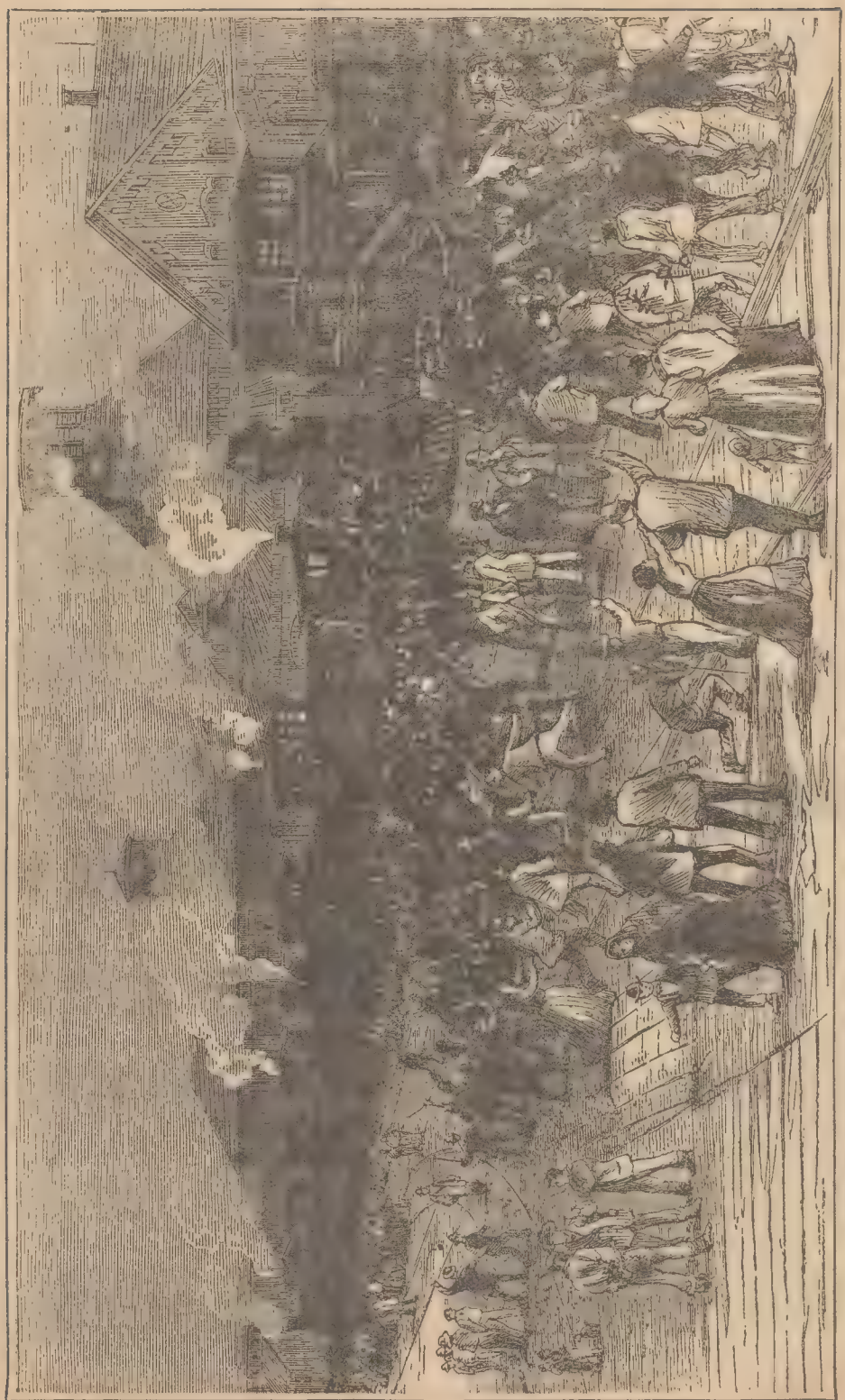
THE determination of Baltimore & Ohio officials to cut the wages of train and engine men in freight service on July 16th, 1877, at a time when flour was high and bread was scarce, led to the biggest railroad labor demonstration in American history.

It led to a walkout which tied up almost every road in fourteen states in that vast area from the Hudson River to the Mississippi and from Canada to Virginia. It led to mob rule which cost more than a hundred lives and the burning of property worth millions of dollars—an orgy of blood and fire which was stamped out by regular troops of the United States army in five of the fourteen states.

Of course, the wage reduction wasn't the only point at issue. The men complained of irregular employment, since many were laid off away from home three or four days at a time in a single week, and of slow pay, since wages sometimes were held up as long as three or four months in a row. Then, too, it was the second ten per cent pay cut which the men had suffered since the panic of 1873.

Logically, the strike should not have started on the Baltimore & Ohio Railroad; several other big roads had already imposed that second ten per cent pay cut before the B. & O. joined the procession. Besides, the B. & O. had a pretty good excuse. John King, Jr., first vice president, explained that the great business depression which commenced in the autumn of 1873 had continued growing from bad to worse. The Baltimore & Ohio's revenues had decreased greatly. Other trunk lines had reduced wages ten per cent, one of them on the first of June and two of them on the first of July.

"It will be observed," stated King, "that the Baltimore & Ohio was the last company competing for the great trade of the West which made the second reduction of ten per cent. Since the panic of 1873, not only have rates of through freight and other traffic been reduced by severe and



Scene at Martinsburg, W. Va., Before the Arrival of the Militia, When All the B. & O. Engines Were Blockaded

active competition, but the quantity in the aggregate has been diminished. Especially is this true in the coal trade. And even with the (new) wage cut the average wages paid to train and engine men in freight service are 35 per cent higher than the wages paid in January, 1861, although the rates for through freight in 1861 were double those of 1877."

King gave the following comparative figures for wages per day paid in B. & O. freight service:

January, 1861	Minimum	Maximum
Conductors	$1.33	$1.66
Brakemen	1.00	1.33
Engineers	1.33	3.00
Firemen	1.11	1.75

July 16th, 1877	Minimum	Maximum
Conductors	$1.80	$2.25
Brakemen	1.35	1.58
Engineers	2.25	2.93*
Firemen	1.35	1.53

(* Premium 25c. not included.)

The real reason behind the wage cut, of course, was the stupid competition for both freight and passenger business between New York and Chicago. This cut-throat competition had brought rates down to ridiculously low levels, often far below actual cost. For instance, livestock was carried from Chicago to New York, considerably over 900 miles, at a dollar a carload, and passengers were transported between the two cities for as little as $2.50 a round trip. Someone had to pay for those losses; the burden was passed on to the employees. Most of them accepted it without too much grumbling, but in Baltimore forty men in freight service showed resentment by leaving their trains, on the morning of July 16th, and declaring a strike.

The company answered their protest by hiring forty "scab" engine and trainmen in their places. But the strikers would not permit them to work. Assembling at Camden Junction, about three miles from the city, they stopped all freight trains and refused to let them run in either direction. A drag from the West, bound for Locust Point, Md., was derailed by the strikers. The cars were smashed and the engine cab set afire.

ALMOST instantly the news flashed over the entire system. At Martinsburg, W. Va., where large B. & O. shops were located, a hundred members of train and engine crews joined the walkout and forcibly prevented new hands from operating the trains. Locomotives were uncoupled and run onto sidings. A cattle shipment bound for Baltimore tried to pull out of Martinsburg. Strike sympathizers swarmed into the engine cab. One of them flourished a revolver and asked the scab engineer where he thought he was going.

"Tuh Baltimore," replied the hoghead.

"Oh, no, you ain't!" said the man with the gun. "You're pulling this train back to the stockyards to be unloaded, and be damn quick about it!"

The train went back to the stockyards.

Thereupon the railroad company sent a frantic telegram for help to the governor of West Virginia. The governor immediately sent seventy-five men of the Berkeley Light Infantry Guards, under command of Captain C. J. Faulkner, Jr., who were rushed to Martinsburg on a B. & O. special.

Reaching Martinsburg, they unloaded into a crowd of about five hundred strike sympathizers. Threats and catcalls greeted them. Captain Faulkner put them to work at once, deploying them on both sides of a freight which a scab crew was attempting to take out of the city.

As the train reached a switch, a striker named Bill Vandergriff seized the switch ball to run it onto a sidetrack. A militia man named John Poisal, who happened also to be a freight conductor, jumped from the pilot of the engine and attempted to replace the switch.

What happened immediately after that will always remain a matter of controversy. Strike sympathizers insisted that Poisal fired the first shot. Poisal maintained later that Vandergriff carried a revolver and fired a bullet which grazed his cheek.

This much is undisputed: Poisal and other militia men trained their revolvers on

William Vandergriff, the striker. Vandergriff fell to the ground with bullet wounds in his hips, his head and arms.

In the excitement the scab crew took to their heels. Captain Faulkner rallied his men, issued a command to march away. He saw the temper of the mob and was taking no more chances. The militia company went straight to the armory and ingloriously disbanded, leaving the strike sympathizers in possession of the field.

The railroad yards around Martinsburg were very much congested, with trains standing on all of the sidetracks. Rioters were celebrating. There was nothing that the local authorities could do but close all liquor saloons in the city and send out a call for state and federal aid.

Meanwhile, the strike movement was spreading westward to Wheeling, on the main stem, and also to the Parkersburg branch. The governor, Henry Matthews, appealed to the President of the United States, Rutherford B. Hayes. Mr. Hayes responded promptly, issuing a proclamation which ordered the rioters to disperse, and sending 400 troops of the regular army under Major General William H. French from Washington on a special train. William Keyser, the B. & O.'s second vice president, accompanied them in his car.

The soldiers reached Martinsburg early on the morning of July 19th. They were armed for battle, with Springfield rifles and three Gatling guns. They found 1,500 freight cars, some loaded, and seventy-three locomotives blocking the sidetracks in and about the city, but the main line was still open.

That day, under protection of bayonets, freight traffic started moving again to the east and west from Martinsburg. The blockade was partly lifted, but the strike was not ended. Indeed, it had hardly begun.

Inflamed by military interference, it became general even before nightfall of the 19th, crossing the Ohio River and extending as far west as Chicago.

At Grafton, W. Va., strikers cut bolts and connecting chains from all freight locomotives, ruining them for immediate use.

Erie Strikers Stopping an Express Train at Susquehanna, Pa.

and driving off the engine crews by force. At Newark and Columbus, O., freight trains were stopped and the wires west of Martinsburg were cut.

THE second big railroad to be swept into the strike was the Pennsylvania. On the morning of July 19th, the third day after the movement had started in Baltimore, the Pennsy freight men struck at Pittsburgh, partly out of sympathy with the B. & O. strikers, but chiefly because the company had doubled the number of cars on each train without increasing the number of the crew, and also had more than doubled the distance.

At the morning call the freight conductors charges indignantly: "I think it outor more of them assembled in the yards and stopped every drag that attempted to roll a wheel. A dozen cattle trains at the East Liberty stockyards also were stopped. By midnight of the 19th fully 1,400 men had gathered in the two yards, and 1,500 cars were standing on the sidings; 200 of them were loaded with perishable goods.

Meanwhile, B. & O. Railroad officials balked at furnishing additional transportation to Major General French and his troops except on orders directly from Vice President King, because of "the drunken condition of Major General French himself." The railroad company was reported to have supplied three gallons of whisky and two dozen bottles of ale in twenty-four hours for use in the general's private car.

Major General French answered the charges indignantly: "I think it outrageous that if the officials put whisky on board they should turn afterward on the officers for accepting the hospitality."

Construction Gang Under Protection of Soldiers Rerailing a Lackawanna Train Derailed by Rioters at Corning, N. Y.

Finally, on the 22nd, the troops were given another special train and went merrily on their way. But while this petty bickering was going on, one of the bloodiest days of the strike was written into history.

Word reached Baltimore on the afternoon of the 20th that all the freight trains leaving Martinsburg that day (still under military protection) were being stopped by the strikers at Cumberland, Md., and the crews taken off them.

Thereupon the governor of Maryland, John Lee Carroll, issued an anti-rioting proclamation and ordered out the state militia at Baltimore. All day long throngs of citizens had been milling about the city anxiously watching the bulletin boards at newspaper offices and arguing over the situation. The clang of firebells at 5.30 P.M., calling the men to their armories for military duty, created the wildest excitement.

As the alarm rang out, crowds made their way toward the armories of the various regiments. That of the Sixth was located at Front and Fayette Streets, in a neighborhood frequented by the rough element. Before 6 P.M. a crowd of at least 2,000 men, women and children of Baltimore had surrounded the armory and were protesting against military intervention.

The crowd kept growing as men poured out of factories, sweat shops, stores and offices. Streets leading to the Sixth Regiment armory were jammed with a yelling, cursing mob.

At 7.30 a man in uniform endeavored to get into the building. The rioters seized him, threw him over a bridge into Jones's Falls, a stream which ran through that section of the city. Other militia men were seized and thrown over the heads of the mob; they were glad to escape with slight injuries.

Then some one threw a brick at the soldier guarding a door of the armory. It was followed by a shower of missiles, which soon destroyed windows and doors of the building and injured some of the men. The whole available police force of the district was concentrated at this spot, but was powerless to quell the rising tumult.

Construction Gang Repairing Lackawanna Tracks Torn Up by Strike Sympathizers at Corning, N. Y.

At 8.15 P.M. Colonel Peters decided to march his command of 150 men to the Camden station, to which General Herbert had ordered them to report. Each man was supplied with twenty rounds of ammunition and a breech-loading Springfield rifle. They marched out with rifles loaded.

When they reached the door, passing out two by two, the order was given to stoop down as a shower of missiles greeted their appearance. The citizen soldiery wavered a moment, then marched solidly into the street, pressing back the angry mob and dodging stones. Finally the "tin soldiers," as they were derisively called, could contain themselves no longer and opened fire on the strike sympathizers.

From then on, their progress toward the station was a series of rifle volleys in answer to showers of stones and scattering shots. Stores were hastily closed; peaceful citizens got off the main streets. At least nine persons were shot dead by the militia in their march to the depot, and a large number were wounded. The Fifth Regiment also was attacked en route to the station. All in all, it was a sad-looking group of citizen soldiers which finally reached the shelter of the railroad station. Vice President King of the B. & O. turned

The Ninth Regiment of the New York State National Guard Taking Possession of the West Albany Freight Yard, July 24, 1877

his private car into a hospital for the benefit of his military allies.

Late in the night of July 21st the rioters in West Baltimore set fire to a 37-car train of coal oil. This they fired by throwing wads of cotton waste saturated with flaming oil onto the train, but only seven cars, with three hundred barrels of oil, were burned. The rioters intended to run the train into Mount Clare and destroy the huge B. & O. shops there.

Shortly afterward a conflagration broke out near the President Street depot of the Philadelphia, Wilmington & Baltimore Railroad in Baltimore, but the efforts of police and firemen saved the station.

MEANWHILE, at Pittsburgh, Pa., the situation was growing more desperate. The sheriff called for state aid. Governor John F. Hartranft issued the usual anti-rioting proclamation and ordered out the militia. This increased the tension; strike sympathizers still refused to let freight cars leave the city.

All over the East the strike movement was spreading. On July 18th the men struck on the Western and Buffalo divisions of the Erie road, extending from Hornellsville (now Hornell) to Dunkirk and Buffalo. No freight trains were allowed to leave Hornellsville in either direction.

On the 21st, President Hayes issued another proclamation, warning all rioters to disperse within twenty-four hours. The situation was critical. Calls for federal troops were coming from five states: West Virginia, Maryland, Pennsylvania and Illinois. All New York State regiments (16,000 men) were assembled in their armories. At Brooklyn, N. Y., a regiment

was loaded aboard a special train on the Erie, en route to Hornellsville. The train reached Elmira at 7 A.M. on July 24th. Armed guards were stationed on the engine and tender and on platforms of the coaches to see that the train was not stopped.

Rioters attempted to clamber aboard at Corning, but were beaten off. Then they turned the switch and at the same time blocked the main line by overturning a baggage car on it and damaging several locomotives. The fireman of the troop train deserted to the strikers. He helped them tear up the track for a short distance at several places. More cars were overturned.

The troop train was effectually stopped, but a construction party was organized; under the protection of bayonets it gradually rebuilt and reopened the line. At half a mile from Hornellsville the train was derailed by a loosened rail. Thereupon the troops unloaded and marched to the depot. In a short time some freight trains were running in and out of Hornellsville.

On July 22nd Governor Hartranft ordered out every regiment in the State of Pennsylvania. That night there was a strike riot at Reading, culminating in the burning of several cars. Soldiers killed thirteen of the mob and wounded nearly fifty. The Lebanon Valley Railroad bridge over the Schuylkill River, which had cost $50,000, was burned.

In Philadelphia strikers set fire to an oil train, but only four of the cars were burned. By this time the eastern ranks of the strikers had been swollen by men from the New York Central, the Delaware, Lackawanna & Western, the Delaware & Hudson, the Morris & Essex, the Lehigh & Susquehanna, and the C. N. J.

At Indianapolis strikers seized the Union Depot and refused to let trains run, with the single exception of mail cars. At Chicago the strike movement embraced the B. & O., the Michigan Central, the Illinois Central, the Rock Island, the Chicago, Burlington & Quincy and the Chicago & Alton. In some cases the men walked out eagerly; in others they had to be driven away from their jobs by force.

At East St. Louis, Ill., the strike sym-

The Strike Around Reading, Pa., Reached Its Height When the $50,000 Bridge of the Lebanon Valley R. R. (Now Reading) Over the Schuylkill River Was Burned

This Peaceful Little Incident Was One of Many Which Happened When Strikers Attacked "Scab" Switchmen

pathizers ran into a snag. The movement spread to the Ohio & Mississippi (now B. & O.) and the St. Louis & South-Eastern (now L. & N.), but as those two roads were being operated by receivers appointed by a federal court, detachments of United States regular soldiers were summoned to enforce operation of the O. & M. and the St. L. & S. E.

In most cases the railroad strikers themselves were well organized and orderly; strike sympathizers and the military element caused most of the disorders. The strikers were hampered by the fact that a large number of company spies circulated among them and betrayed their plans. The strikers made special efforts to keep mail cars running. A committee of striking engineers on the Buffalo Division of the Lake Shore & Michigan Southern wired to the Postmaster General at Washington:

> **None of the mails have been interfered with or stopped here by parties known as strikers. We will furnish all engineers and firemen to pass all the mails regularly, at our expense, if the railroad companies will permit it.**

Vice President Cassatt (later president) of the Pennsylvania Railroad made a fast run from Philadelphia to Pittsburgh in his special car, and went straight to East Liberty with Superintendent Robert Pitcairn, Sheriff R. C. Fife, a party of forty-five deputies, and a regiment of national guardsmen from Philadelphia.

Sheriff Fife mounted to the cab of the locomotive, read the riot act and harangued the mob. They jeered and laughed. The sheriff ordered his deputies to arrest the ringleaders. A strike sympathizer shouted: "Give them hell!"

Immediately a shower of stones was hurled at the troops. The latter opened fire, killing sixteen of the citizens and wounding a great many more

This massacre inflamed the mob. "Lynch the Philadelphians!" and "Burn the railroad shops and depots!" were heard on every hand. A large crowd broke into Johnson's Gun Works and seized two hundred rifles and a quantity of small arms, while other rioters confiscated three hundred additional rifles.

THE Philadelphia troops, numbering more than eight hundred, retreated into the large P. R. R. roundhouse at 28th and Liberty Streets, taking with them two Gatling guns and other pieces belonging to Breck's battery. There they barricaded themselves against the Pittsburgh mob.

Rioters seized a cannon, loaded it, and planted it within 100 feet of the roundhouse. But before they could open fire, marksmen picked them off one by one. When the next dreary day dawned thirteen dead bodies were found beside that cannon.

Unable to dislodge the troops in any other way, the insurrectionists resolved to burn them out. An oil train was set afire and run down the track against the sandhouse, near the roundhouse. The sandhouse was burned to the ground, but the roundhouse was saved by the soldiers within, who used the railroad hydrants to fight the flames.

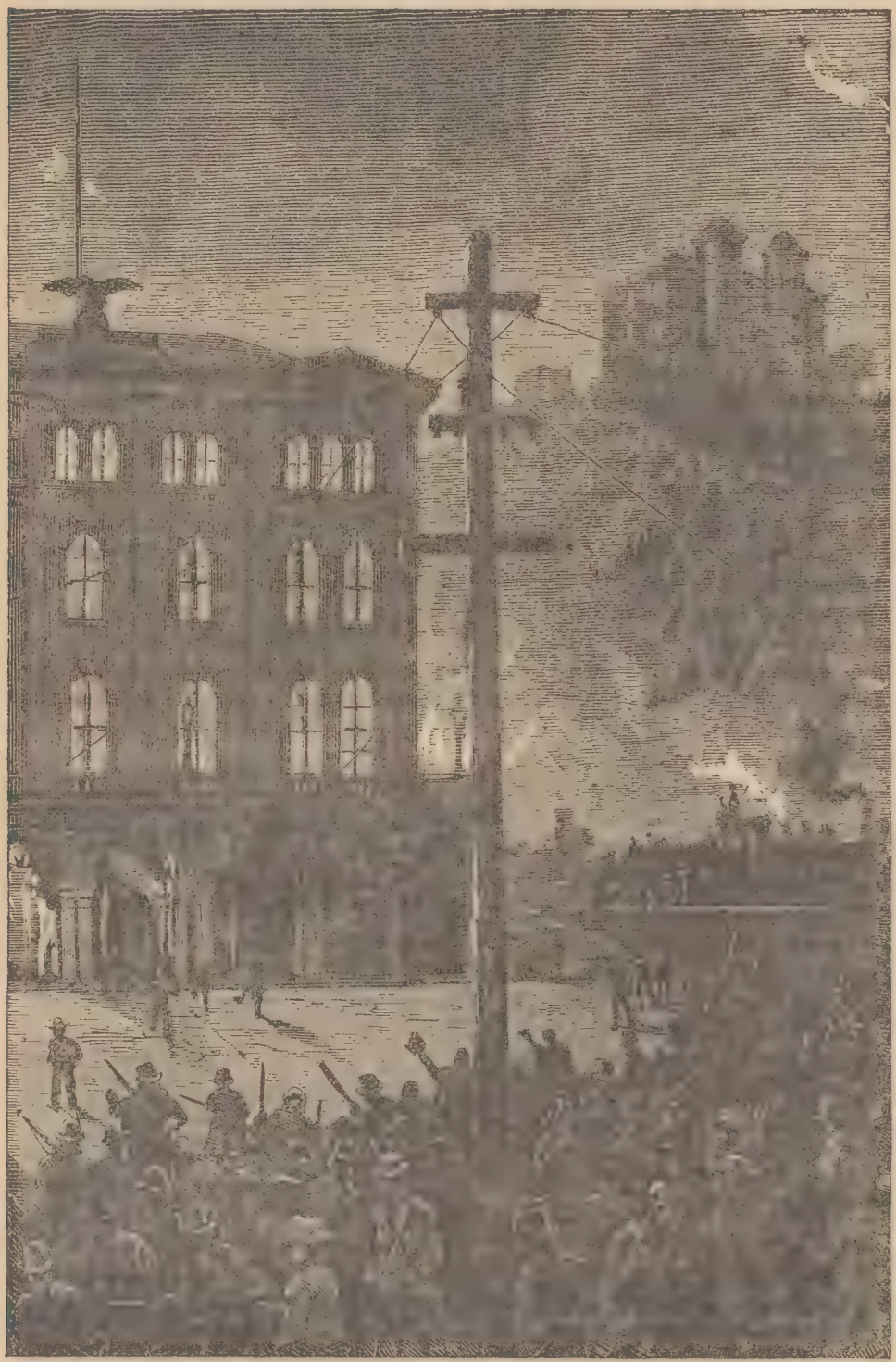
Nearly suffocated by the stench of burning oil, the besieged troops vacated the roundhouse at seven the next morning, which was Sunday, and retreated to Sharpsburg, fighting their way through the mob, killing and being killed.

Once incendiarism was started, the rioters did not rest until they had destroyed 1,600 freight and passenger cars, many of them loaded with valuable merchandise, and 126 locomotives, together with all machine shops and railroad offices in the vicinity. The mob planted their cannon in the streets nearby and informed the city firemen they'd blow them to pieces if they tried to put out those flames.

The firemen beat a hasty retreat, and the work of destruction continued unabated. While the torch was being applied, thousands of men, women and children took part in pillaging the cars. Men armed with heavy sledge hammers broke open the box cars and threw the contents to the frenzied mob. Hundreds of wagons were pressed into service to haul off the loot. Here would be a woman with brawny arms rolling a barrel of flour through the crowd; a boy would be lugging a huge family Bible; a man would be pushing a wheelbarrow loaded with hams or fancy parasols

Strikers Marching Down the New York Central Track at West Albany, N. Y., July 24, 1887

In Pittsburgh the Great Strike of 1877 Took Its Heaviest Toll



When the Four-Story Union Depot Was Burned to the Ground

or household goods. Thousands were grabbing, fighting, robbing, running off with their booty.

Meanwhile, the flames had spread to Pittsburgh's four-story Union Depot. Rioters, impatient at the delay, had rushed into the stationmaster's office, bursting open desks and offices, scattering books and papers over the floor, and saturating them with oil.

"The Union Depot is on fire!" The cry went up from a thousand throats. Hundreds of persons climbed to the high tower in City Hall to get a magnificent view of leaping flames and billowing clouds of smoke that reddened the sky for miles.

Next a huge grain elevator, 150 feet high and eighty feet square, was reduced to ashes, even though it did not belong to the railroad company. The Panhandle Depot on Grand Street and the locomotive shop on Quarry Street met the same fate.

By this time a vast area for a distance of three miles was a wall of fire, and before the sun went to rest that night not a railroad building nor a car of the Pennsylvania and Panhandle roads was left unburned in Pittsburgh. The loss was estimated to be about $7,000,000. At least fifty-three of the rioters had been killed and 110 injured. In addition, eight soldiers were killed and nearly forty wounded.

The strike had now become so general throughout the East that the Pennsylvania Railroad annulled all trains until the civil and military authorities could guarantee their safety.

On the Pittsburgh, Chicago & Fort Wayne orders were given to discontinue all trains. The strikers thereupon took possession of that entire road, and ran passenger trains nearly on scheduled time.

The leader of this movement was Robert Ammond, a clear-headed and intelligent executive who knew how to handle both men and trains. On Saturday evening he

Ruins of the Pennsylvania R.R. Roundhouse and Car Shops at Pittsburgh After the Fire

was a humble brakeman. On Sunday morning he was a capable superintendent, dispatching trains, issuing passes, and receiving all reports from employees, officials, stockholders, and even from Manager Layng. On Tuesday morning he resigned, rather reluctantly, to become a humble brakeman again.

During the three days he was in charge not a single accident occurred on the line, although there were plenty of danger and excitement on all sides.

ALL over the State of Pennsylvania were riots and bloodshed and the burning of railroad property. At Scranton the striking trainmen were reinforced by miners of the district; three leaders were killed, many injured; the mayor was knocked down and barely escaped with his life. At Nanticoke a scab engineer was shot.

In Chicago, on July 26th, the troops fired upon a crowd of strike sympathizers, killing ten and wounding sixty-four. The trail of blood and fire spread to St. Louis, and even to San Francisco, where a vigilance committee was organized.

The railroad labor leaders were appalled at the destruction of property by mobs and at the terrible loss of life caused by the rifles of militia men and soldiers of the regular army. As troops occupied the great railroad centers, one after another, they put down the rioting without mercy and thus enforced the operation of trains. Labor leaders had no heart for fighting the United States army. Gradually the strike died down, without attaining its object.

The railroad officials, aghast at such display of force, were quick to offer the olive branch at the first signs of weakening of the strike. On the Pennsy, for instance, Superintendent Pitcairn announced at Pittsburgh that the striking engineers and firemen could have their own engines again if they returned to duty at once. What happened as a result of this announcement was summed up by a newspaper reporter:

The Loss Was Estimated at About $7,000,000; and Hundreds of Rioters Were Killed or Injured

William H. (" Commodore ") Vanderbilt, Who Gave His Loyal Employees $100,000

The old engineers claim they had been forced to join the strike, and are only too glad to get back. I saw them this afternoon (July 30th) at the dispatcher's office, where they were to report, according to Supt. Pitcairn's proclamation. They flocked in like taxpayers at the tax office on the last day before penalties begin to run, each man to put his name down on a paper headed simply: List of Loyal Men Now Ready to Go to Work. Hundreds of trainmen and engineers had signed during the day.

The following scene was frequently repeated: Enter young fellow, a trainman or engineer. He says nothing, but walks up and looks over the long list of names and sees some of them marked with a cross.

"What does that black mark mean?" he asks nervously.

"That is to indicate the man is an engineer."

"Oh!" comes a sigh of relief. His eye runs over the list rapidly, and finally he says sullenly: "By God, they are all there! Well, put my name down, too."

William H. Vanderbilt, president of the New York Central, was elated when the rioting ceased, and issued a statement to his employees on August 1st:

> **We have passed through a period of unparalleled excitement. . . . I appealed to you to resist willful lawlessness at the hands of rioters, to protect the property of this company, and assist in restoring order. Your response has won the admiration and respect of the whole country. Of this company's 12,000 employees, less than 500 have shown any disposition to embarrass it.**

Vanderbilt went on to say that as a token of his appreciation he was distributing $100,000, rated according to their position on the payroll, among all his employees, except executives and clerks.

Thus ended the biggest railroad strike in American history. Although the strikers did not win the wage scale they had fought for, they demonstrated a power that the officials could never forget. From that time on there was a gradual improvement in railroad wages and working conditions. These two facts, it must be admitted, are more than mere coincidences.

You're bucking the odds

WHEN YOU BUY THE *unknown*

● Why gamble your money on unknown razor blades when a known-quality blade like Probak Jr. sells at 4 for 10¢? Probak Jr. guarantees plenty of clean, cool shaves. Tomorrow, start the day with Probak Jr. Buy them from your dealer.

PROBAK JUNIOR

The Sunny Side of the Track

OS'D THE WRONG TRAIN

MY first job as extra stands out in my memory like a sore thumb. Back in 1911 I held the night baggage agent job at Lansdale, Pa., on the Philadelphia & Reading, and had just qualified for the extra list. One evening they ran short of an operator and I received the following telegram:

"Go to Oreland. Pusher waiting to take you to Corsons. Work 3rd trick until further notice."

Now, Corsons is on the single-tracked Plymouth Branch. Since every move was controlled by train orders, my board was out at all times. All I had to do was take orders and write out clearance cards.

After I relieved the second trick man I looked around. No town, not even a house, only a trestle bridge, a short distance west of the station. Tucked in a corner of the office closet I found a soft comforter. In no time at all I was dead to the world.

An hour or so later, I guess, something startled me. I jumped up. The tail end of a freight was rumbling over the trestle, westbound.

"Sure came mighty near missing that one," I thought, still half awake, and OS'd it by. (OS means, of course, "on the train sheet." It means reporting the passing of a train.)

Yet this train never showed up at Plymouth Jct. Finally the train dispatcher, in despair, called Oreland, east of Corsons. There had been nothing westbound for two hours!

Well, that sure woke me up. The joke was on me. The Pennsy ran parallel to the Reading and, unknown to me, their tracks were in back of our station. I had OS'd a Pennsy freight by mistake, forgetting that we kept a red board out all the time. There I was, caught asleep on my first op's job! —E. W. Reiter, Shelly, Pa.

* * *

A BREAK FOR THE DISPATCHER

"LOOK OUT, kid!" roared Hogger Heevie MacMillan as he strode into my office. "I want to talk to that fool dispatcher."

"What's the matter now, Heevie?" I soothed.

"Matter!" he bellowed, waving the smoking torch in his hand. "If you'd been ten hours on the road and doubled back, as a personal favor, and then that old nanny of a dispatcher put you in the hole both ways—"

I got the dispatcher on the wire and told him Heevie's sad tale. Finally he agreed to listen to the engineer.

"Say, how the devil does this thing work?" Heevie grouched. "I never had any use for these danged phones anyway."

I fixed him up and pulled the transmitter to within an inch of his nose.

"Dispatcher!" he shouted into the mouthpiece. "This is MacMillan. What's the big idea puttin' us in the hole? Ain't we doublin' back to please you guys? And what do you do? Give us bum meets, stab us every chanst you git—" He raved on in this vein for a full five minutes.

"What did the dispatcher say to that bawling out, Heevie?" I asked when he finished.

"Nothin' at all. He knows dang well when he's told off."

That struck me funny, knowing the dispatcher as I did. Suddenly an idea occurred to me.

"You sure you had your foot on the transmitter pedal?" I asked.

"What pedal you talkin' about?" Heevie growled.

"The pedal under the desk," I pointed out. "If you don't put your foot on it the dispatcher can't hear a word you're saying."

As a matter of fact, he didn't!—Merton A. Dyce, Lytton, B. C., Canada.

* * *

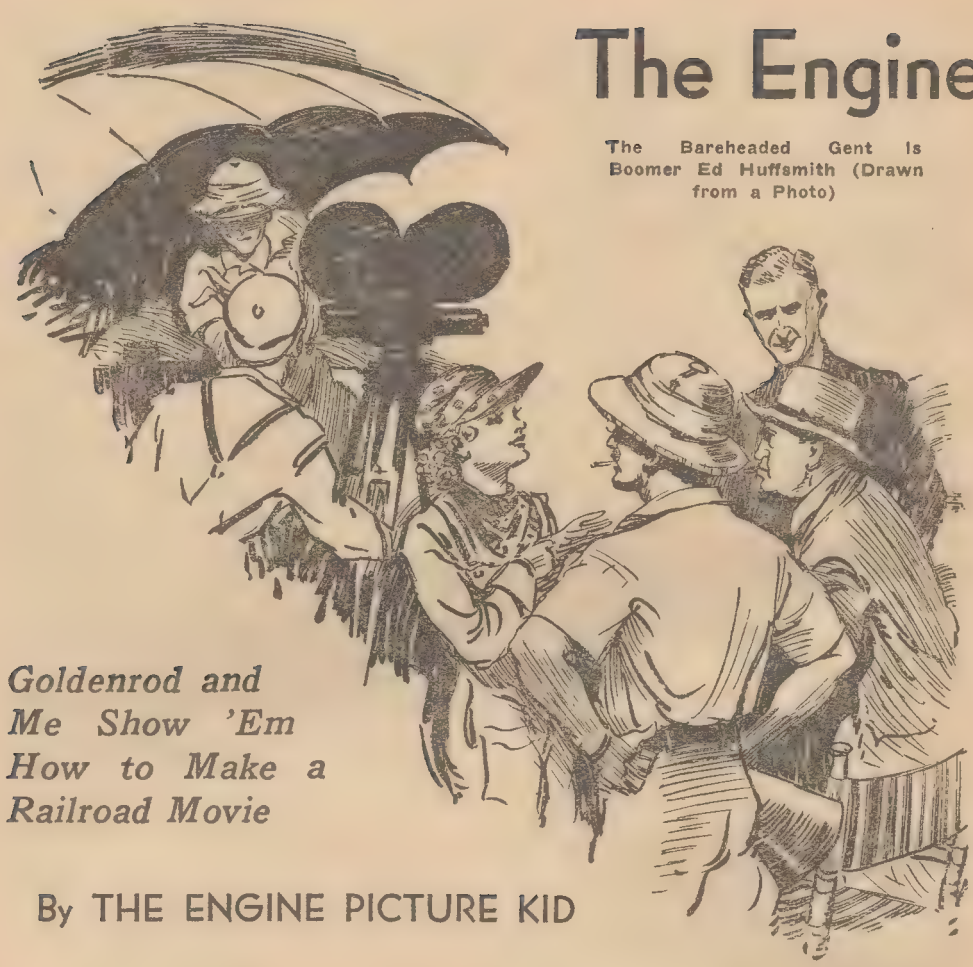
FISHING IN THE SKY

GEORGE STAMETS, Pennsy signal maintainer at Frenchtown, N. J., reports he bagged a fair-sized buck shad by back-firing the engine on his rail-motor car. This is how he did it!

The signalman noticed a fish hawk flying overhead carrying a large fish in its talons. Thinking quickly, he caused the motor of the rail-car to emit a loud bang. The hawk dropped the fish. Stamets brought it home, still alive, and exhibited his unique catch to station employees.

For further details, consult Mr. Stamets. He insists the story's true.—Phil Blaze, 504 Tyler St., Trenton, N. J.

The Engine



The Bareheaded Gent Is Boomer Ed Huffsmith (Drawn from a Photo)

Goldenrod and Me Show 'Em How to Make a Railroad Movie

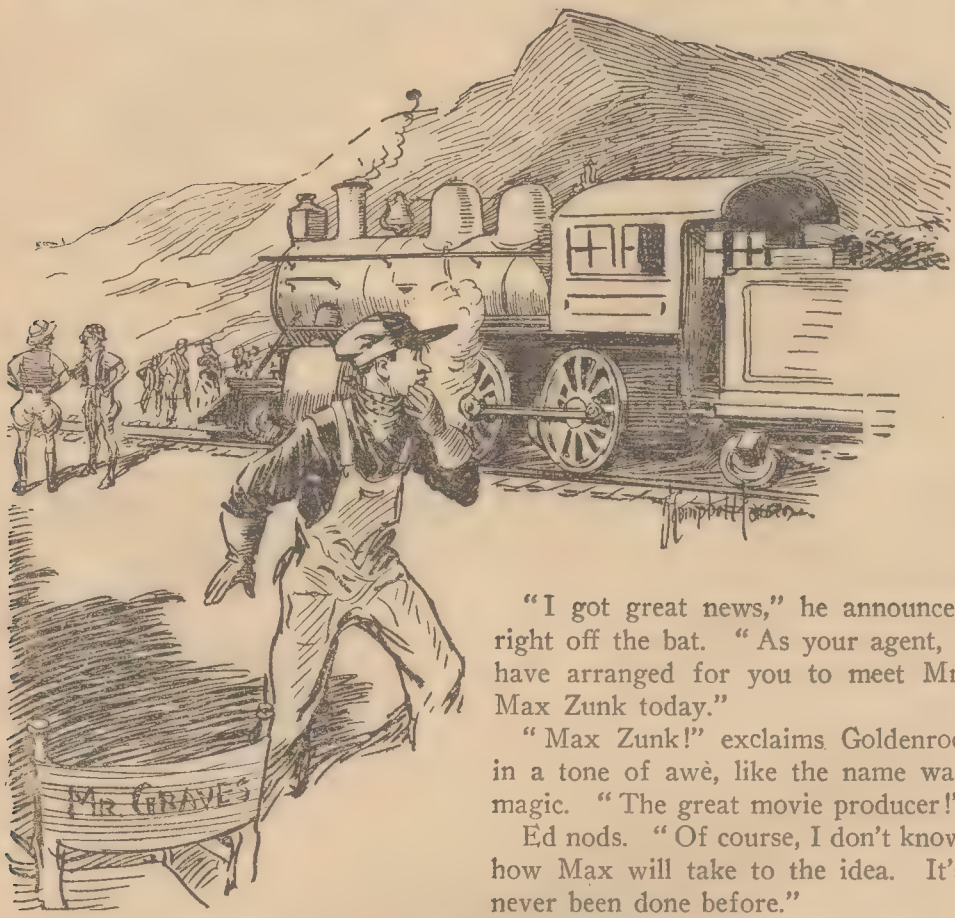
By THE ENGINE PICTURE KID

FOR a while I thought Goldenrod and me wouldn't get back from Ethiopia in time to help with the railroad movie. Not that it would make much difference to the movie boys, who would probably be very much surprised to learn that we were planning to help them, since we ain't told them yet. You see, we figured on getting introduced to the moving picture show business through our friend Ed Huffsmith, who lives in Long Beach, Calif., which is not far from Hollywood.

Well, to make a short story even shorter, we got back in time, for Ed informs us that Max Zunk, the big shot of Zunk Productions, Inc., has not yet begun his great railroad masterpiece. It seems that Mr. Zunk is having a lot of trouble in getting what he called a good sock ending for his picture, to say nothing of a smash-bang middle and a dynamic introduction. I suppose that is the trouble most producers have, but with a couple of experienced rails like Goldenrod and me in the picture Mr. Zunk's worries are practically over.

Mr. Zunk doesn't know that yet, of course, but neither does he know I am an A-Number Ace engine picture fien', and member of the International En-

Picture Kid in Hollywood



gine Picture Club. Nor did he know Goldenrod was the good-looking, all-burn-haired daughter of Hardshell Higgins, ex-boomer hogger and president of his privately-owned three and ½ mile Happy Valley Line up in Saskatchewan, Canada. But he will know all this pretty soon, for Ed Huffsmith had the introduction all arranged.

Ed is an old-time boomer who often writes letters to "The Boomer Trail" department of RAILROAD STORIES. (See page 31.) Tall and slim, we recognize him waiting for us at the Los Angeles station with his flivver.

"I got great news," he announces right off the bat. "As your agent, I have arranged for you to meet Mr. Max Zunk today."

"Max Zunk!" exclaims Goldenrod in a tone of awe, like the name was magic. "The great movie producer!"

Ed nods. "Of course, I don't know how Max will take to the idea. It's never been done before."

"What hasn't?" I want to know.

"Having people in railroad pictures that really knew something about railroads," says Ed. "But Zunk will try anything once. He goes in for novelties."

A couple of minutes later Ed pulls up to the studio gate of Zunk Productions, Inc., and after giving his pedigree, age, race, creed and color to the guardian of the sacred portals we are finally personally conducted by a youngster named Moe Ginsberg into the great producer's sanctorum sanctum.

This is a big room very elaborately furnished. There is quite a crowd of

people in the office all saying yes to a shrewd little guy sitting behind a big black walnut desk. One big 200-lb. bird is standing over in a corner with his face to the wall.

"Who it that?" I whisper to Ed.

"The production manager," says Ed. "He disagreed with Max about something, and he's being punished."

Just then the little guy behind the desk gets up from behind his desk.

"Listen," he snaps to the crowd of guys around him, "when I want any more bum suggestions from you birds, I'll make 'em myself. Understand?"

"Yes, sir," sing the assistants.

Zunk moves forward, and his quick eye catches sight of the man in the corner. "You too, Bernie. Only remember I don't want to hear no more no's out of you. It makes me nervous."

"No, sir," says the big goof, making a bee line for the door.

"Yi-yi!" screams Max as he steps up and shakes Goldenrod's hand. "You hear that? I'm a busy man, and I can't get no co-operation around this dump."

WELL, I must say Ed Huffsmith is a good talker, because it does not take more than a half hour or thirty minutes for him to sell Mr. Zunk on the idea of making his new railroad picture a movie that rails can enjoy as well as the general public.

"Had any picture experience, Miss Higgins?" says Zunk, standing back and appreciatively appraising Goldenrod's trim figure.

Goldenrod admits she hasn't.

"Good!" says Max. "We'll make a star out of you."

This makes me peeved, because Goldenrod used to pose for movies I made of her lots of times on the Happy Valley Line.

"How about the Kid?" puts in Ed. "He oughtta be in the picture with Miss Higgins."

Zunk's eyes practically bore through me, and it is very obvious that while Max maybe is slightly dizzy he is not a fellow that anyone would call a chump.

"Can't use him," he decides. "We don't need no comics in my epic of the rails."

"He knows a lot about locomotives," says Ed.

"Sure, and maybe he's a good pinochle player too," counters Max.

Just then the phone rings. Max yanks it off the desk. After listening a minute he places the mouthpiece tight against his chest, and looks at Ed.

"Always I got trouble, and always I can't get no co-operation," he says. "It's Milton Graves on location. He's directing this rail picture we been discussing."

Suddenly he turns to the phone again.

"O. K.," he barks into the mouthpiece. "I'm coming out in person. I got an idea. Huh! You think it's great. Say, Milt, if it was only great I couldn't use it. It's terrific."

The next thing we are all in a sleek, shiny studio limousine and whisking out the front entrance of Zunk Productions, Inc.

"What's up?" asks Ed, as we speed along the smooth ribbon of highway through the hills behind Hollywood and out towards the open desert beyond.

Max explains that Barry Carlyle, the star who is playing the male lead in his movie railroad drama has gone temperamental and is threatening to quit because his double is stealing all the good shots in the picture.

"So you get a chance to play in pictures, Kid," he says to me.

"Well," I says, "that is very kind of you, Mr. Zunk, but I do not want to put a good actor like Barry Carlyle out of work."

"Don't worry," snaps Max. "It ain't Barry's job you get. It's the double's."

Then he explains that this double's job is really a very fat part and I will play in all the big scenes. Like, for instance, where the hero is trapped in a burning box car, it is me and not Mr. Carlyle who gets singed. And also in the shot where the engine dives off of an embankment with the hero at the throttle, it will not be Zunk Productions' big star who takes the fall, but me.

"Catch on?" says Max, getting very enthusiastic. "And in the sequence where the villain slugs Barry one on the chin, it's really you he pastes in the kisser. Of course, you don't have to do no real acting."

"Yeah, I can see that," I says. "And if it is all the same to you, Mr. Zunk, I would just as soon have some other part like firing an engine or something."

"Nope," says Max firmly. "Double or nothing. It's the opportunity of a lifetime."

"Of course it is," puts in Goldenrod. "And you should appreciate what Ed Huffsmith and Mr. Zunk are trying to do for us."

Still before we get out to the location where Zunk has rented a whole branch line of the Southern Pacific while he is making his picture, I am wishing that we had gone up to Oakland way, like Miss Selma Prescher invited us to, instead of coming to Hollywood and getting mixed up in the moving picture business.

After a while we turn off the highway and wind over a dirt trail across the desert to a section gang's shack standing alongside a single pair of tracks. There's a siding a few hundred feet down the main with some box cars on it. Right in front of the section house is an old high-wheeled 4-4-0 with steam up. A movie camera is set up by it and another down by the siding. A gang of people are hanging around the tracks, evidently awaiting our arrival.

NOBODY seems to be paying much attention to the locomotive. So while everybody starts talking at once I climb into the cab, anxious to see what kind of steam a movie fireman can keep up. The fire ain't bad. After looking around some I drop onto the right hand seatbox, thinking that some day when I am a hogger, and not just a boomer fireman, I will maybe have money enough to marry Goldenrod, and keep her old man Hardshell Higgins in cigars, and we can live in a little white house, just Goldenrod and me, of course, beside the main line of the Happy Valley.

Anyhow, day-dreaming like that, I just naturally lean forward and crack open the throttle. The engine responds smoothly. But you would of thought I was stealing the engine the fuss those fellows raised when the locomotive's drivers started turning.

"Get away from that cab!" shouts a nervous bird through a megaphone. "You'll be killed!"

Naturally I know better than that. So to prove it I decide to run the engine down to the siding. This starts more of the very confusing commotion on the part of the movie people, although I see one fellow running like a startled deer for his camera.

My intention was to stop at the siding switch, but I am rolling a little too

fast by that time and besides the switch is thrown for the siding. The engine bounces over the switch frogs, and I can see I am going to bump the box cars.

"Jump, you fool!" yells the bird with the megaphone.

However, as I do not like to destroy other people's property I do not bail out of the cab until I have tried my utmost to prevent the impending crash, and the result is that I leave the right hand gangway in a flying leap at virtually the moment of impact.

I hit the cinders on my face and it is very lucky that I do so, for the next instant there is a terrific explosion and splinters of demolished box cars shower all around me. I am still trying to figure out what happened when a crew of grips and property men rush up and drag me to my feet. The fellow with the megaphone comes with them.

"The start wasn't so good," he says. "We weren't ready for it. But the finish was a wow."

I am surprised to see that the locomotive has turned over, and steam is spurting from her busted boiler. The drivers are still spinning. There is nothing left of the box cars but kindling wood, and the wheel trucks.

"Mister," I says to the fellow with the megaphone, who I guess is Milton Graves on account of that is the name painted on his loudspeaker, "I hit them cars easy. What and the hell—"

"You hit 'em just right," says Graves. "We were all set for the big scene when Barry's double walked out on us. The pilot of the engine was loaded with dynamite to insure the explosion."

"Dynamite!" I gargles.

"Sure," goes on Graves. "In the previous scene the villain tied it on, and threw the switch onto the passing track in the hope of killing the hero."

"Mr. Graves," I says, "something tells me working in a railroad movie ain't going to be no improvement on firing for a bird like my future father-in-law, Hardshell Higgins."

Ed Huffsmith and Goldenrod and Max come up then. Ed and Goldenrod want to know how I feel, and I tell them as well as could be expected under the circumstances. Max turns to the director.

"How did it come out, Milt?" he asks.

"Perfect," beams the director.

"Okay," grunts Max Zunk. "But do it better next time."

However, I do not care whether Mr. Zunk is the head of Zunk Productions, Inc., or just the owner of a hot-dog stand, and I tell him that if I'm to be the bird in the cab, there ain't going to be any next time.

"KID," says Goldenrod, bringing up a tall, dark handsome fellow with a lot of grease paint on his face, "I want you to meet Barry Carlyle."

"Ho-hum," says Barry.

Ho-hum yourself, I thinks, and right off I have a feeling that Mr. Carlyle and me are not going to be very friendly. Especially the way he takes Goldenrod's hand in his and smiles down at her.

However, before I can say anything, Max Zunk moves to the center of the group.

"Attention, everybody," he announces. "While we are waiting for another locomotive, I'll explain the picture we are making."

"It 's from that old railroad poem, 'Billy Richardson's Last Ride,'" says Graves.

"Oh," exclaims Goldenrod. "The

one that starts off: 'Through the West Viginia mountains came the early morning mail.'"

"Sure," goes on Max. "Only on account of we got you in the picture, Miss Higgins, we're going to call it 'Goldenrod's Last Ride.' And it ain't going to be a mail train; it's going to be a fast freight because we want to work in some of the 'Little Red Caboose Behind the Train' in the love scenes."

Personally, I guess the only reason the movies buy a story is so they can change it so much the customers will not recognize it on the screen.

Max turns to Graves. "Get me a couple of writers," he says. "We'll change the story now."

"Okay," says the director, "and while them bums are fixing it, I can shoot the burning box car sequence." He puts his finger on my chest. "That's where you come in, son."

It appears that I have got to get into an asbestos suit and hide in a box car full of kerosene-soaked straw, to which a guy applies a match.

"And listen you," says Graves, "don't you come out of that car until I give the word."

"Well, Mr. Graves," I says, "I hope you won't be tongue-tied when the time comes. Anyhow, I think it would be better if you used a dummy for this scene."

"I am," says Graves, giving me a shove towards a box car set out on the main line above the section house. "Get going now. We'll probably have to take this shot a dozen times to get it right."

The last thing I see as I climb into the straw-filled box car is Goldenrod and this star actor Barry Carlyle walking down the tracks in the distance with their heads very close together. While I am not one to be jealous, I can not help wishing that it was this Carlyle guy who was getting into the box car.

But I guess I am a born actor as well as an engine picture fien', for I only singe an eyebrow and some of the hair off of the top of my head before Milton Graves gets the picture the way he wants it.

There is a lot to making railroad movies that the cash customers do not think about when they are seeing what looks easy on the screen.

In the first place, it costs a lot of money to rent a branch line of a railroad even in these days when the railroads ain't doing as much business as they might. And then them shots you see of nothing but locomotive drivers rolling over the track, why each of them simple flashes represent a cameraman hung out of the cab window with his movie machine only a few inches off the ground while the engine was rolling heck bent for election.

At least they used to until I suggest to Graves why not just set the camera in position with a motor to turn the crank and take the shot and in that way he will maybe keep from breaking one of his photographers' necks.

"We'll try it," says Graves. "Of course cameramen in Hollywood are thick as raisins in a cinnamon bun. But it's an idea."

It works, too, and after that most of the dangerous shots being taken anyhow, Graves talks to Max Zunk.

"That goof we got doubling for Barry," he says, "seems to know something about photography as well as railroads."

"Yeah?" says Max. "I often wondered if he was as dumb as he looks."

But I guess it is all in a spirit of fun because the next day Max Zunk says to me: "We don't need no more dou-

bling on this picture, so you're fired. What we need is a technical director to check on the accuracy of the railroad detail, and I have decided you're going to be the technical director."

Naturally I am more than a little overwhelmed, as I have never directed technically or otherwise anything more than a coal scoop in my previous career.

"And remember," says Max warningly, "if there's any boners in the finished production, they're your fault."

"Yes," I says gratefully. "I am sure they will be."

Well, the first thing I do is pick out the biggest and roughest property man in the gang and tell him to smear a little dirt and grease into Mr. Carlyle's face and clothes so that he will look like a rail and not like a wax dummy dressed up in a new suit of overalls.

"You're not being fair to Barry," says Goldenrod indignantly.

"I'm being fair to the railroad movie fans," I reminds her very firmly, all set for an argument.

Anyhow, Goldenrod goes off to change her shoes and the next argument I have is with the Southern Pacific which sends us out another old 8-wheeler.

"Nice looking," Graves remarks, "ain't she?"

"Sure, but she won't do," I explains. "We're taking a freight picture now. That fast-stepping 8-wheeler is a passenger job. We got to get one of them freight Moguls for this."

The Southern Pacific is very surprised when we get them on the phone and say that a locomotive is a locomotive and they'll send out what they feel like because it ain't going to be used in nothing but a picture anyhow. So Max Zunk gets into the argument himself and I must say he is a very neat talker when he is mad, and he tells the S.P. that when he is paying for track use and equipment, he's going to have the kind of locomotive his technical director calls for. And in the end he gets it, although I guess the Southern Pacific would have been very surprised indeed to know who Mr. Zunk's technical director was, as when I was a boomer call boy I have been fired off more than a few divisions of that road myself.

WHILE nobody but the cashier's department which paid for "Billy Richardson's Last Ride" would know that the picture "Goldenrod's Last Ride" was taken from the song, we get along pretty good except that Goldenrod starts talking less and less to me and more and more to Barry Carlyle.

In fact she rides in to Hollywood with him at night a couple of times after the day's work is done, and even visits him at his home in Beverly Hills, leaving me and Ed Huffsmith to make the trip alone in Ed's flivver.

The way it is in the picture we are making Billy Richardson, who is Barry Carlyle, ain't a hogger at all. Goldenrod is the hogger. And she is on a fast freight run. Barry is the skipper of her train. He is supposed to be in love with her, but so is another eagle-eye who turns out to be a very mean cuss. One of the big scenes is where Barry and Goldenrod is sitting on the steps of Barry's crummy in the light of a tie fire and he plays a guitar and sings the real song, "Billy Richardson's Last Ride" to her and makes love to her.

I do not enjoy watching them make this scene because I am not too sure whether Mr. Carlyle is only acting or not.

Another big scene is where Barry is tied up in his own caboose, which is a part I like, and the villain is supposed

to start the crummy and a cut of cars rolling to certain destruction down a steep mountain grade. In the picture Goldenrod sees the runaway and chases it with her locomotive. When she catches the caboose she is supposed to climb out on the catwalk and onto the pilot and leap aboard the caboose, saving both the cut of cars and Barry from going over a cliff on a bad turn in the grade, just beyond where the rescue is made.

Only it don't work out that way. We have the cars and the engine and everything up at the upper end of a two-mile mine spur that was abandoned by the S.P. The mine is set high up on the side of a narrow canyon. The tracks ain't too good. But I figure they will do, especially as there won't be any real racing done.

After Barry is tied in the crummy and the villain starts the cut on what is supposed to be a wild ride, a lot of fellows who don't show in the picture are supposed to climb aboard the runaway cars and tighten the handbrakes so that the runaway will really be going very slow. And then Goldenrod, pretending she is flying down the grade, will creep after the caboose and make the connection. Naturally when the picture is put on the screen they will speed it up to look very much like the real McCoy.

Well, they get Barry tied up in the crummy all right and everybody starts talking and re-arranging cameras and things when some dumb guy must of accidentally kicked out the blocks from under the wheels. The next thing I know the cut is rolling wild down the grade. Three or four guys run for the grab irons on one of the box cars but tangle as they reach for it and get spilled in a heap beside the tracks.

For a brief moment Goldenrod stands there horrified; then she turns to me with a little scream.

"Kid, Barry's in that caboose!" she screams. "Do something!"

Personally although there are other guys I would maybe rather save than Barry Carlyle, I do not like to see anybody, even an actor, killed while he is tied up in a runaway caboose.

"Come on," I says to Goldenrod, grabbing her wrist and running for the engine puffing away a few yards up the track.

I take the gangway in two leaps, pulling Goldenrod after me.

"Turn her loose," I says. "Maybe we can catch them cars before they dive off a turn into the canyon."

Goldenrod don't say a word. White-faced, she reaches for the throttle. The Mogul jumps forward and starts to clatter down the grade. We don't pay any attention to the warning shouts from Graves and the movie people who yell and stare at us as we roll by down the rotten roadbed after the flying cars.

Goldenrod, leaning out of the cab, gets a glimpse of the rear end of the caboose whip around the first bend.

"I'm going out on the pilot," I announce. "We've got to catch them cars before we hit the hairpin curve near the foot of the hill."

About half way down the hill I strain my ears and think I can hear the rattle of the runaway above the clanking of the Mogul's side rods. We snap around an out-jutting section of solid rock, and there are the cars in front of me, bobbing up and down like a few tin cans tied to a dog's tail.

I signal Goldenrod to step on it. The Mogul leaps forward. Just as we touch the couplers come together; the pin falls with a click, and Goldenrod gives the engine an air application to break

the speed. I manage to scramble over the railing of the crummy platform.

Barry Carlyle has been bounced out of the bunk in which he was placed when he was roped up and is being slapped around back and forth across the crummy floor by the jolting motion of the speeding cars. I don't have no time to cut him loose so I grab onto his collar and yank him to the platform.

Goldenrod is handling the runaway perfectly. With its speed checked but still fighting against a full stop, the locomotive comes to rest, its leading truck derailed but still upright. I ease Barry down to the ground, and jump after him. Goldenrod swings out of the cab and comes running rapidly toward us.

We get Barry cut free from his bonds, and he sits down on part of the wrecked crummy and starts chaffing his wrists to get the circulation back.

"Well," I says to Goldenrod, "we saved him."

The next instant I am more than a little surprised because Goldenrod throws her arms around me, and kisses me right in front of Mr. Carlyle.

"Kid," she says, her eyes glowing softly, "there are times when you are wonderful."

She just stands there looking at me, and I know now for sure that Barry is out of the picture—if he ever was in.

Just then Ed Huffsmith and Milton Graves and Max Zunk and a whole crowd of the movie boys come hurrying down the tracks. They are very amazed to see us all alive and sitting there joking by the derailed Mogul's pilot.

"Phew!" says Ed. "I give you up when that engine plunged around the first bend. What you got in your pocket, Kid, horseshoes?"

"No," I says, "but I got a camera in the cab of the Mogul and I'm going to take a picture of this wreck before I leave here."

"Yeah," says Milton Graves, "the best action shot in a hundred years, and not a cameraman covering it."

"Sure," snaps Max Zunk. He turns to Goldenrod. "You see what I'm up against. I'm the best moving picture producer in Hollywood, and still I don't get no coöperation."

Just like a boomer, Ed asks me and Goldenrod where we're going next.

"Reno, Nevada," I says. "Got an invitation from Jimmy Richardson. Jimmy says they're digging gold out of the Virginia & Truckee roadbed."

"That's not the real reason we're going to Reno," Goldenrod chimes in.

"No, it ain't," I says. "The real reason is to get some good shots of V. & T. motive power."

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The Boomer Trail

BACK in pre-depression days it was the custom of boomers who had moved S.P. fruit cars out of San Joaquin Valley in Calif. to hie themselves to El Paso. There they hung around "Alligator Park" until they could be marked up on the E.P.&S.W. or T.&N.O. board to move the vegetables coming through from Imperial Valley.

Most of the boys arrived with pretty good stakes, but Juarez being just across the border and the U. S. being afflicted with the Volstead Act, you can bet the boys spent quite some leisure across the bridge until such a time as the roll would be depleted or they were marked on the board.

In 1929 many of them were cut off as early as November and went to drown their sorrow at Juarez. Bank rolls went, and still no hope. Watches had gone the way of all good boomers' watches. I arrived on New Year's Eve. When I got off of No. 14 the station platform was full of hungry snakes, stingers and tallowpots. They gave me the heavy eye. I was still wearing an overcoat and carrying a watch.

To a gang like that I must have looked like Santa Claus, running a week late. Suddenly I had friends that I never knew of. After getting cleaned up at the hotel some kind soul suggested a trip to Juarez. It sounded like a swell idea to me and I never dreamed there wasn't even one nickel left in the crowd.

Across the bridge we trekked into the "Big Kid's" place. We were hungry, so we ordered everything on the menu, with plenty of liquor besides. There was a floor show going on and all the boys, being out for fun, set up the girls to plenty of drinks. As the evening wore on the check grew and grew.

Along about 11.45 P.M. someone reminded us we had to get back across the bridge before midnight. I called for the check. It was $62 and a few cents over! Figuring up for the 6 of us, I requested 10 bucks from each of the boys. One snake replied: "You got a roll, ain'tcha? None of us has been marked up yet, and we ain't got a cent." The censors wouldn't allow me to print my reply, so we'll skip it.

This called for some fast thinking, as I didn't feel like being broke so soon. Finally we decided that the rest of the boys would saunter into the bar and then into the room with all the poetry on the wall. Meanwhile I would retrieve their hats and my overcoat from the check room and meet them in front.

The gang moved out on their maneuver and I grabbed one of the show girls and started to dance with her. I told her my plan as I knew all the dames were down on the Big Kid anyway. Then I dropped her by the door, slipped the hat check girl two bits, and dashed out to meet the gang. There was a street car going by at the time, and all 6 of us took it on the fly. No one said a word until we were back to Mr. Volstead's country.

Then some boomer piped up with: "Say, Mule Ears, how much did that New Year's Eve party cost you?"

"Two bits," I said, "to get your hats back."

We went to Juarez several times after that, but never again to Big Kid's place.—"MULE EARS," Los Angeles, Calif.

* * *

CONNECTING with the Union Pacific or Burlington in 1872 was a small railroad, the Atchison & Nebraska, 3-foot gage, from Grasshopper Falls, Kan., to Leavenworth with only one rail. No, it wasn't one of those monorails much talked about but never built. One side of the trucks ran on the A.&N., the other side on a Missouri Pacific rail. Nothing like that can be found today.—LANSING ROBINSON, 225 Fifth Ave., San Diego, Calif.

* * *

TEAMSTER MUCKERS are the forgotten men who made possible our modern railroads, though many lost their lives in doing so. I remember the cave-in at the west portal of the Great Northern's Cascade Tunnel, where many of these men were entombed. Just outside the entrance is a cemetery for others killed during the boring of this tunnel.

At the time the G.N. was building its main line from Jennings, Mont., the town of Jennings was pretty bad. It was there the contractors paid off the men. A bunch of desperadoes who knew this would lie in wait for the workers. Those who resisted were often beaten and their bodies thrown in Kootenai River. Once I saw a man shot down in a saloon by the callous bartender. The man had cashed his check and left most of it with the bartender. When he came back for the remainder the bartender denied having it. An argument ensued, the bartender drew a gun, and there was never even an inquest.

I've often wondered how the U.P. finished the double track west from Cheyenne. They always had three gangs—one going, one working and one leaving. Once I saw half a beef lying in the sun outside a road camp. It had been there over 24

hours when I saw it, and was still there the next day. A teamster told me he had worked 3 days, sleeping at night in a vermin-infested bunk. When he asked for his time, the timekeeper said he had a $4 bill overdue at the commissary. The teamster protested that he had bought nothing, but it did him little good. By the time the 10% discount for cashing his check was deducted, he received only $1.80 for the 3 days' work!

There was a racketeering boss on the Deschutes branch of the G.N. On pay days he would leave his coat at a convenient spot and all his men were supposed to contribute; those who did not, went down the line.

But the worst contractor I ever ran across was on another Western road. He had a stretch of roadbed through a windy alkali flat, a tough proposition for both men and beasts. Before they started to work each man went to the commissary for a dose of something or other. A short time later I was astounded at the violent activity in the bunch. By noon they were almost dead on their feet. Again they were given the same ration. Result, new life and much pep. I learned that these men were "snow birds" (cocaine addicts).

Then there were always the camp followers and tinhorn gamblers, leeches who lived off the teamsters. I remember one saloon keeper on the Rock Island branch from Tucumcari, N. M., who used to attach 4 lbs. of chewing tobacco to the inside of the whisky barrel head. That put some kick to the rest of the dynamite already in the barrel! —E. C. HUFFSMITH, 243 Atlantic Ave., Long Beach, Calif.

* * *

ANSWERING Gus Mackenzie's request (Sept. issue) for information about Indianapolis wreck Oct. 31, 1903, in which 16 Purdue Univ. students were killed: At that time I was messenger for the trainmaster of the Indianapolis Union Ry. Boarding the Big 4 wrecker, I went to the accident scene. A switch engine with coal cars was on the main line on the passenger train's time. They met on a curve. Wooden coaches were smashed to splinters; their occupants were fearfully mangled. Engineer Shoemaker, of the passenger train, never returned to work on the Big 4 but ran an engine for years on the Florida East Coast out of Fort Pierce.—F. J. ("BOOMER") CURD, 2562 Winnemac Ave., Chicago.

* * *

ONE day when I was firing a westbound passenger train on the Santa Fe, we pulled into a siding to let an eastbound by. The flagman threw both the main line and spur switches. After the limited had said good-by, he threw the main line switch but omitted to throw the spur switch before giving the signal to back out. Rear trucks of the last car went on the ground, causing an hour's delay. While I was sitting on a rail watching the re-railing procedure, a passenger sat down beside me. He was an engineer on his way to Mexico.

Soon afterward I went to Chicago and got a job firing on the Indiana Harbor Belt Line. Two years later the hogger I was firing for laid off. The name of the man who replaced him seemed familiar. He proved to be the engineer who had sat beside me on the Santa Fe track 2 years before.—F. C. DARLING, Darling's Sheet Metal Works, Walton, N. Y.

* * *

"HIGHBALL JOHN" BURNS (Nov. issue) took a slam at the C.&A. when it was "young." We used to think it was middle-aged when I was a boomer telegraph operator there, along in 1895 and 1896. The Alton had so many wrecks that boomers, when ordering their "Ham and—," would specify the eggs as "C.&A." for scrambled.

Old Willis E. Gray, general supt., was a former train dispatcher. Through hook or crook he had been sent to the Alton. He was one of the hard-boiled type who thought he owned the world. While he was a dispatcher on another road he had put out a lap order which caused a head-on collision.

Shortly after he came to the Alton, he called up for investigation a conductor who, unknown to Gray, had been in that very collision! Gray lashed into the con about a recent accident, berating him for carelessness. The con replied:

"Well, I suppose I made the same kind of mistake that you made when you put out the lap order and ran 2 trains together."

He was not discharged. However, Gray had such a mania for firing men that when a culprit was called on the carpet he almost took it for granted that he was out of a job. It is said that on one occasion Gray called a crew of boomer switchmen for investigation. Those boomers knew what was coming, but they didn't care. They all got empty tin cans, which they tied to their coat-tails. When their time came they marched into Gray's office in single file, slowly skipped around the official's desk and walked out the door and down to the time-keeper's office for their money. Gray was furious. He followed and tried to reason with them, but the noise of the cans drowned him out.

On another occasion a boomer night operator at Odessa stopped a train on which Gray rode, because the signal light was out. The official ordered him discharged at once. After that the boomer went to Higginsville to live. One night he learned that the super was on a certain train for Kansas City, and "faked" a message to him to return on the next train to Chicago for a meeting. The trick worked. When Gray arrived at Chi. and could not find anything about the meeting, he burned up the wires between Chi. and K. C. trying to locate the guilty party—but he never did!—J. L. CROSS (Rock Is. train dispatcher), Elreno, Okla.

* * *

SNYDER'S "Death Valley Days" was my first choice in your Dec. number. Snyder has the keenest sense of humor of any writer in RAILROAD STORIES. I hope he will favor us again in the near future.—"TURKEY" MOORE, 4605 S. Van Ness Ave., Los Angeles.

The Southern Portal to the 12½-Mile Simplon Tunnel, the World's Longest Railroad Tunnel, Which Pierces the Alps Between Switzerland and Italy

Wartime Railroading

By H. T. WILKINS

STRANGE and thrilling are some of the tales told of railroading in the Great War. For instance, one connected with the Simplon Tunnel.

Just before the war started, the International express from Paris to Milan, Italy, was approaching the ornate entrance to the Simplon Tunnel at the Swiss station of Brigue. Travelers who have taken that route by the banks of the Rhone will recall that, before their train enters the miles of tunnels, it passes under a stately portico of massive rock surmounted by the famous lions of Switzerland carved in stone. But they did not know what was concealed in the roof of that portico.

Suddenly the massive chains holding up a huge door of iron and concrete, entirely hidden within the portico's threshold, snapped and let fall this huge barrier of hundreds of tons, right onto the railroad tracks, completely blocking the iron way down through the steep tunnels to Domodossola and the hot summer plains of Italy.

These chains themselves weigh several tons. Luckily, the terrific crash of metal on stone was heard by a signal-tower man and he set the semaphores against the onrushing express.

A terrible disaster would have resulted had the passenger train hit the door—which is a war-door built into the rock by the Swiss Government to block a possible invasion of Italy by railroad up through the long tunnels from the plains of Lombardy. No one, apart from secret service men and some railroad engineers, knew this government secret. Nearly an hour's hard work was needed to set back the door into its original place.

Incidentally, the only other railroad tunnel with doors is said to be the one located in Canada at Brockville, Ontario. This was Canada's first railroad tunnel, started in 1854 and opened for service May 4, 1860. The masonry has required few repairs and is still about as solid as when originally built, but is not often used today

except for freight service. It runs under the city for about one-third of a mile.

At both ends of this tunnel are doors which, in winter, are closed every night to keep out the frost, they say, and opened in the morning. In summer they are usually left open all the time.

Tourists who have stayed in hotels on the German bank of the Rhine are not likely to forget the strategic railways on both sides of the river which were built years ago by Count von Bismarck, the Iron Chancellor.

Years before the Great War the German Reich began to push these strategic railways nearer and nearer to the Belgian frontier—exactly as the Czarist Government of Russia, prior to 1914, built hundreds of miles of strategic railroads on the frontiers of Eastern Germany.

One such railway, of no profit-earning capacity whatever, was blasted through the narrow and lonely valley of the wild river Ahr, in the beautiful upland country of Eifel.

This road was suddenly wiped out by a cloudburst, new bridges were crushed like matchboxes, tracks were torn up and tons of ballast and crossties were hurled at the little stations along the gorge of the Ahr. But the Germans were not perturbed. They simply rebuilt the railway on a high embankment. For what purpose?

The answer was revealed in August, 1914, when long freight and passenger trains poured armed hosts in field gray down that quiet valley into the old-world Duchy of Luxembourg and the country of the wild-boar-haunted Ardennes.

German military photographers snapped some interesting pictures of wartime on the railroads. In 1915, one can see the retreating Belgian army railroad engineers opening the throttles of engines—not of the latest types—and sending them, with no one aboard, careening down the lines to smash into or block the Germany military transport. Other photos show Austrian military trains, with snowplows at their head, sweeping the drifts piled up by the blizzards in Galicia.

On the Russian front, in the same year,

Another View of the Simplon Tunnel Gate at Domodossola, Showing a Train Emerging From It

photographs were taken of ammunition cars protected by the Red Cross hospital flag! It is known, by the way, and admitted by candid ex-service men, that the British in the Near East and in France were none too fastidious about using the Red Cross flag to protect ammunition dumps, or even laying piles of munitions in the vicinity of hospitals!

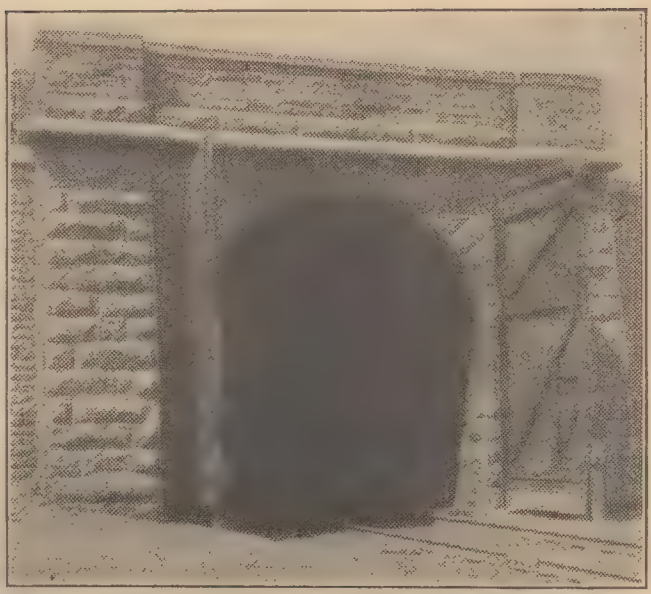


Photo by G. H. Valiquette, 293 Guigues St., Ottawa, Canada

Canada's First Railroad Tunnel, at Brockville, Ont., Is Equipped With Heavy Wooden Doors

FRENCH officialdom came in for much criticism as a result of the way they handled railroad problems during the war. For instance, Robert Graves, captain of the Royal Welsh Fusiliers, said:

> **We were shocked at the severity of the French national accountancy, when we were told that for every British hospital train, the locomotive and carriages of which had been imported from England, the British Government had to pay a fee of £200 ($4,000 at par) for the use of the rails, on each journey they made from railhead to base.**

Consider the case of Sergeant Nigon, who was ordered to escort a railway car with 5000 gas masks to a point near the front. Arriving at a provincial railroad station, his train halted for the night, and Nigon went to sleep. He woke up to find that the car had gone on without him. The railroad officials assured him that the car would return; and it did—two days later! He was now told that the train would go on again next morning, but when he looked for it again, behold, as before, it was not there.

Later Nigon found that the train had reached its destination, and all the gas masks were safe. But that did not prevent the officials from court-martialing him in 1918, when he was sentenced to fifteen days' imprisonment for leaving his post!

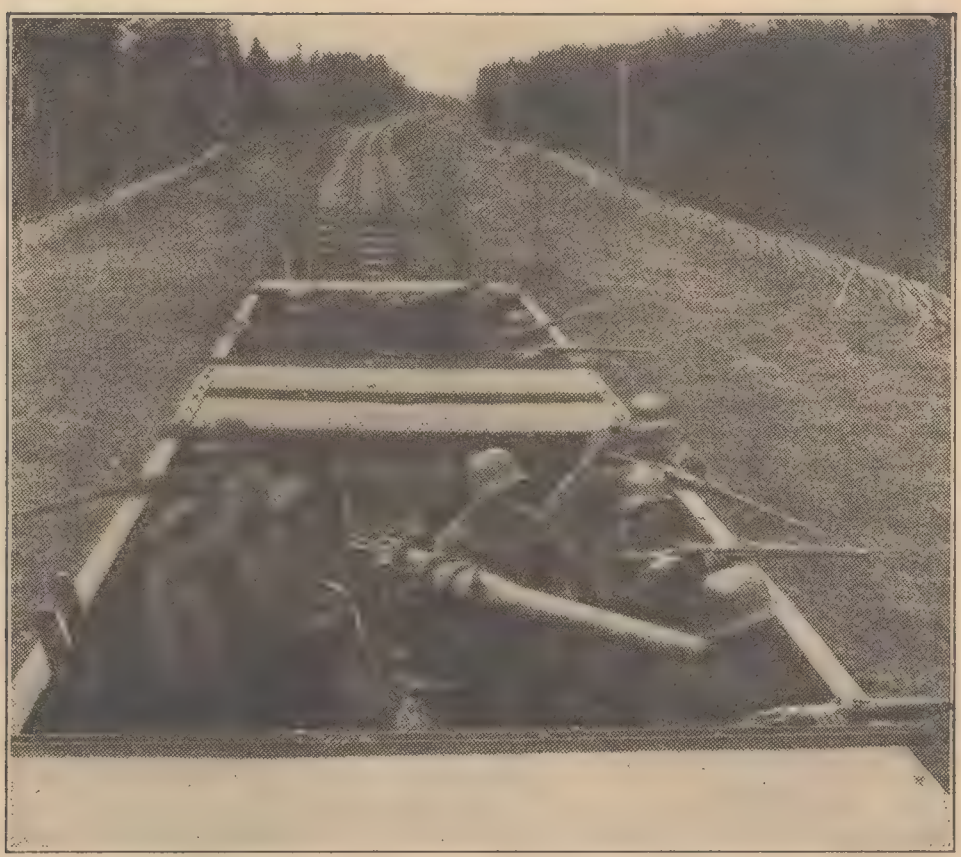
In July, 1933, the ex-sergeant appealed to a special military tribunal for a revision of his case. He said that the reason why he had not slept in the car was a rule permitting soldiers to sleep only in horse-drawn wagons during the war.

"Messieurs," said Nigon, "if I had slept next to the car on the track, I should have been run over; and I did not get inside, because, in that case, no one could have shut the door! . . . How could I abandon my post, since a railroad car is a moving object, while a post is fixed?"

Nigon was honorably acquitted.

ON January 15, 1916, the first through Balkan train left Dresden, while crowds on the platforms cheered as they looked complacently at the destination boards: "Berlin-Dresden-Breslau-Budapest-Sofia-Constantinople."

Along the Hedjaz Railroad, built to link up the Bagdad-Berlin line with Constantinople, the British Colonel Lawrence took a hand at railroad-wrecking. Lawrence told later how he roped a detachment of camels and led them along the track in the Arabian desert. A length of copper wire was snipped



German Armored Car Used on the Russian Front During the World War

from the telegraph line and hitched to a camel. The camel went plodding on across the desert and soon had miles of wire hitched to its rear.

Every now and then, there would be a jerk, bringing the camel up with a bang.

"Ah, there goes another telegraph pole!" someone would shout cheerily.

Lawrence is known himself to have blown up seventeen trains. On one occasion, it is said that he swooped on the desert railway, blew up the line for half a mile, killed sixty Turks and took more prisoners.

The British navy took a turn in emulating Lawrence's adventurous deeds. Captain Larke of the cruiser *H. M. S. Doris* put ashore one dark night at Alexandretta, in the Gulf of Iskanderun, Northern Syria, a party whose faces were blackened like Negro minstrels. The raiders crept onto the railroad track and quietly removed the spikes from the ties. Then, hiding behind trees and rocks, they waited in silence for what might happen to the next train.

But luck favored the Turks. When the train reached the damaged portion of the line, some couplings broke in two in about the middle of the train, and the half attached to the locomotive was hauled at top speed to safety.

ADEN, the hell-fire coaling port in Arabia, was used as a base of the British navy during the war.

Britain wanted to prevent soldiers from falling dead in a barren, fever- and thirst-stricken land. In 1915, a Turkish commander raided right up the walls of Aden. The authorities there were badly scared, and asked for aid. A Welsh brigade was sent out from Britain. The unacclimatized men landed in Arabia but many of them

Behind the Western Front—This Is the Kind of "Railroad" Equipment That Hauled the Troops

dropped dead or unconscious from the terrible heat. And so a light railroad was accordingly laid down in the desert along this road. In 1931 this railroad was put up for sale. The author would like to know what finally happened to it.

A whole railroad line was taken up in Hampshire, England, and bodily transported to France, leaving the stranded farmers to agitate for its return. In 1924 it was brought back to England, relaid and reopened, but in 1932 shut down for good.

A hidden station, from which no trains ever run, on the London subway system, was used in the war as a secret treasure vault, where in alcoves were stored priceless books and King George's crown jewels, removed from the Tower of London for safety from bombing Zeppelin airships. This hidden station is still in use at South Kensington, West London, and seventy feet of electric track link it with the main passenger lines.

W. R. PRICE, the Australian officer to whom General Ludendorf surrendered all his railway equipment and rolling stock at Courtrai, Belgium, at the Armistice, is now serving as superintendent of passenger train service in the Victorian Railways.

His most strenuous railway work was during the closing stages of the war when, as officer in command of the Allied Field Railways in Belgium, he rushed trainloads of troops to the front lines.

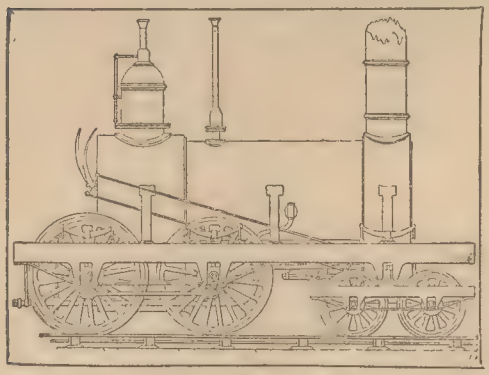
Effects of a Boiler Explosion on Freight Locomotive No. 4 on the Budapest-Bucharest Line at Soosmezo, Hungary, Jan. 14, 1892. There Were No Casualties

The Eight-Wheeler

By ARTHUR CURRAN
Author of "Forney's Iron Horse," "Hump-Backed Hogs," etc.

The Heaviest and Largest Two-Foot Gage Eight-Wheeler Ever Built: No. 15 of the Cornwall & Lebanon (Mt. Gretna Narrow Gage), Constructed by Baldwin in 1889. She Had 10x16 Cylinders, 33-Inch Drivers, 150 Lbs. Pressure, and Weighed 34,000 Lbs. Without Tender

RAILROAD men know, in a general way, that the earliest locomotives were crude four-wheel affairs, and that they were followed by six-wheel engines almost as primitive. It comes as something of a surprise, therefore, to learn that the very popular American type—later known as the 4-4-0—dates back as far as 1837. Henry R. Campbell originated the design in 1836, and James Brooks of Philadelphia completed an engine for him a year later. Like many other early locomotives, this one was inside-connected and had a tall, straight chimney and no cab.



The First Eight-Wheeler, Built by James Brooks of Philadelphia in 1837, Was a Hard-Riding Machine Because Brooks Did Not Know How to Equalize Her Driving Wheel Weights

During the next few years others took up the idea. Some of them placed the cylinders outside; but, not knowing how to clear the leading truck, arranged the cylinders obliquely and carried the main rods back to the rear drivers. Others connected the main rods to the forward drivers, but retained the inclined cylinders. Still others adhered to the inside-connected design.

As time went on, cabs were provided. That was all right, but various excrescences appeared also, and the engines presented a rather junky appearance. To William Mason is due much of the credit for cleaning up locomotive design. Like Thomas Rogers, he was a native of Connecticut; but instead of going to New Jersey, he went to Massachusetts. At Taunton he took up the building of locomotives as a sideline.

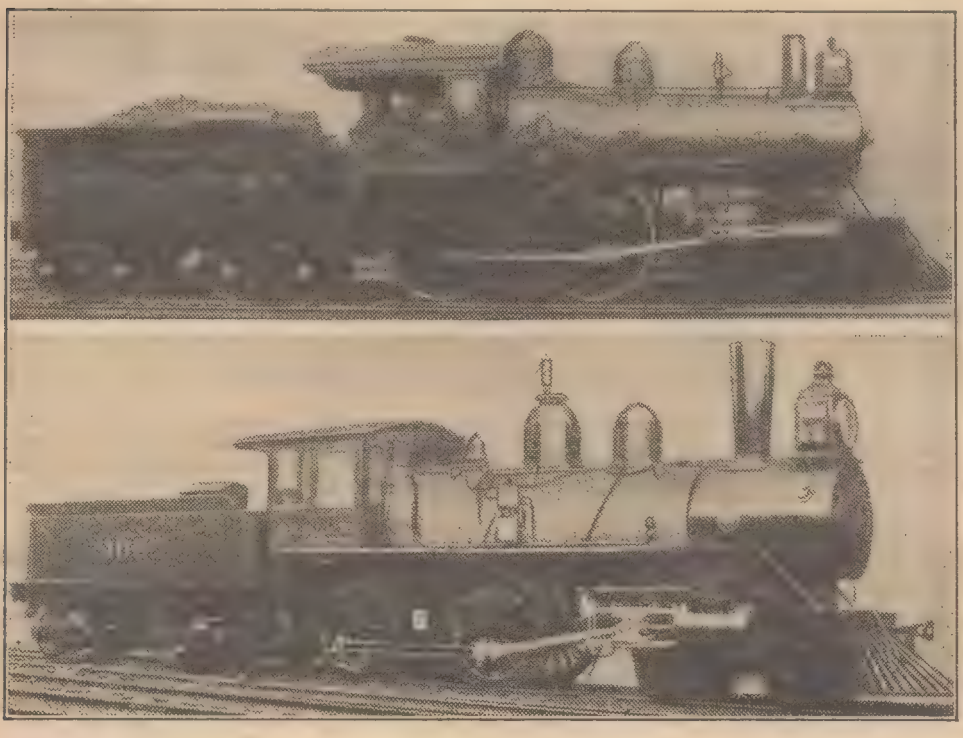
While even his warmest friends would not claim that *all* of them were successes, a considerable number of his standard engines did very well indeed.

By proper arrangement of wheelbase, Mason got the cylinders down where they belonged, and eliminated all of the ugly doodads which spoiled the appearance of so many locomotives while serving no useful purpose.

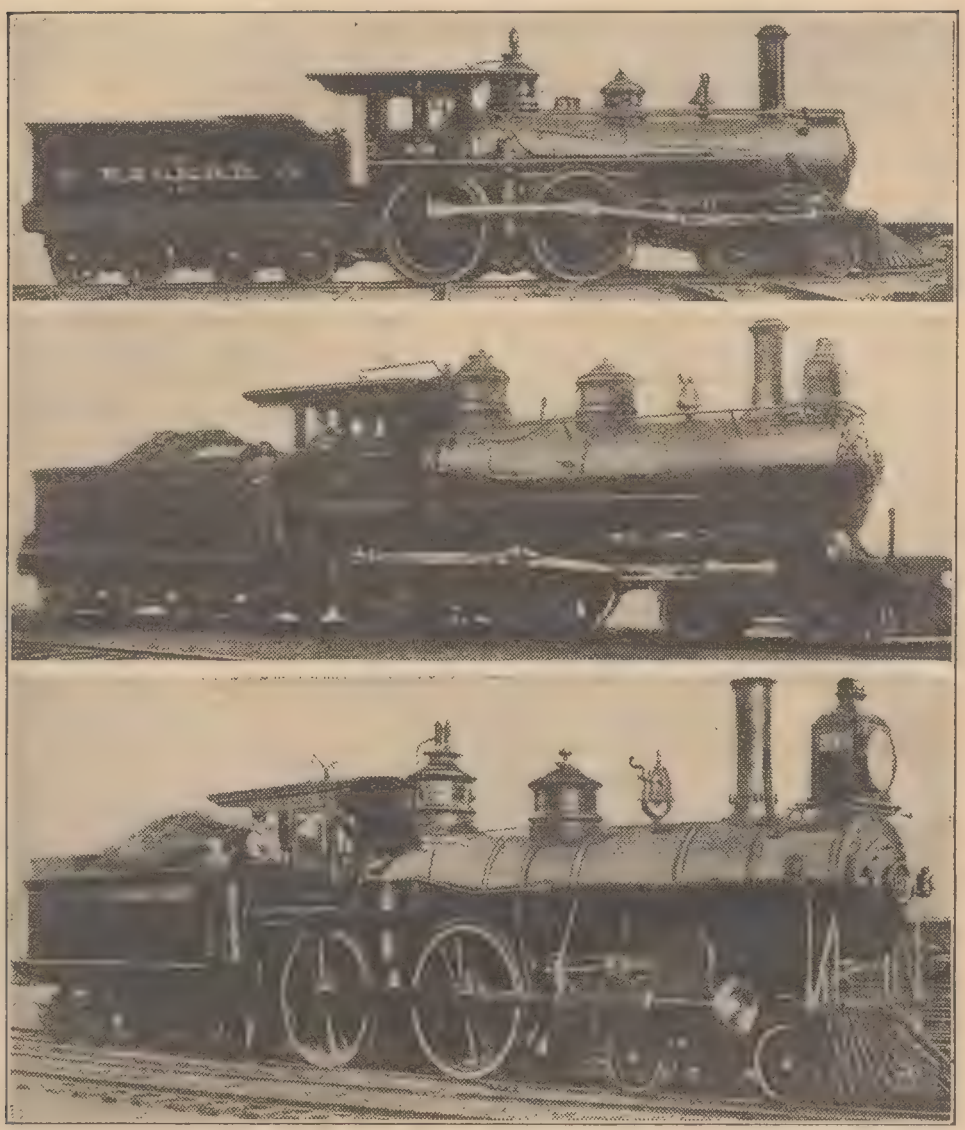
By 1860 the 4-4-0 had become very presentable; although the huge balloon stack—considered necessary in the burning of wood as fuel—was not exactly ornamental. Ten years later, when the diamond stack became popular and coal-burning more common, the 4-4-0 looked better. It was in 1880, however, that real beauty came with a bang. The extension front and cap stack made the American type something to rave about.

Wheeling & Lake Erie No. 19 (page 40) illustrates this period. Completed on August 4, 1882 (builder's No. 687), she was a fine example of Mason's standard engine. With 16x24-inch cylinders, drivers 68½ inches in diameter, she weighed 67,300 lbs. In those days some customers preferred to apply headlights of their own selection after delivery of locomotives. This accounts for the absence of a headlight on this engine, which was photographed at the works.

New York, New Haven & Hartford No. 107 (page 40), built at Hartford Shops, January, 1883, with 18x22-inch cylinders, 68-inch drivers and weight of 83,630 lbs., exemplifies the typical passenger engine of the period on that road. Note the absence of running boards and handrails along boiler. The bread-plate had a red field with silver numbers and beading. These engines made a curious singing or warbling noise when the cylinder cocks were open, and provided the start of each trip with a few bars of music!



(Upper) No. 903 of the N. Y. C. & H. R. Although Never Publicized Very Much, She Was Far Superior to the Famous 999, Which She Resembled. (Lower) Grand Rapids & Indiana No. 105, Which Sported a Bootleg Stack



(Top) A Typical Mason Job: No. 19 of the Wheeling & Lake Erie. (Center) One of the Cooke-Built 4-4-0's Which Handled the "Ghost" Train on the N. Y. & N. E. (Now N. Y. N. H. & H.). (Bottom) No. 107 of the N. Y. N. H. & H., Which Used No Handrails or Running Board on the Boiler, in Accordance with the Practice on That Road

BY 1890 the 4-4-0 had become a rather stout citizen. In that year the New York & New England received some from Cooke, of which No. 166 is an example, with 18x24-inch cylinders, 63-inch drivers and weight of 103,000 lbs. They and some Rogers engines, very much like them, handled the "White" or "Ghost" train and other heavy jobs.

About this time, too, William Buchanan, of the New York Central & Hudson River, ordered some large American type engines from Schenectady Works, with 19x24-inch cylinders and weight of 120,000 lbs. It is now believed that the first of them had 70-inch drivers, but that Mr. Buchanan had one engine fitted experimentally with 78-inch wheels, and that he liked them so

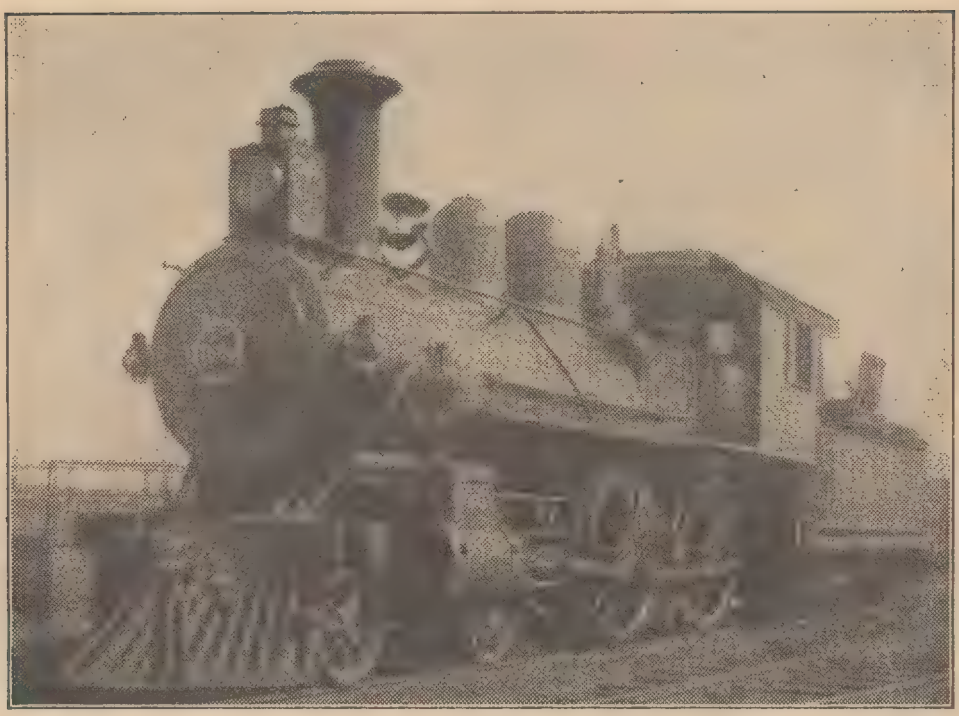


Photo from L. T. Haug, 3207 Adeline St., Berkeley, Calif.

The First Pennsy Engine to Use the Belpaire Firebox Was No. 1628, an Eight-Wheeler

well he had others similarly equipped. Even so, a certain number of each order were given the smaller wheels.

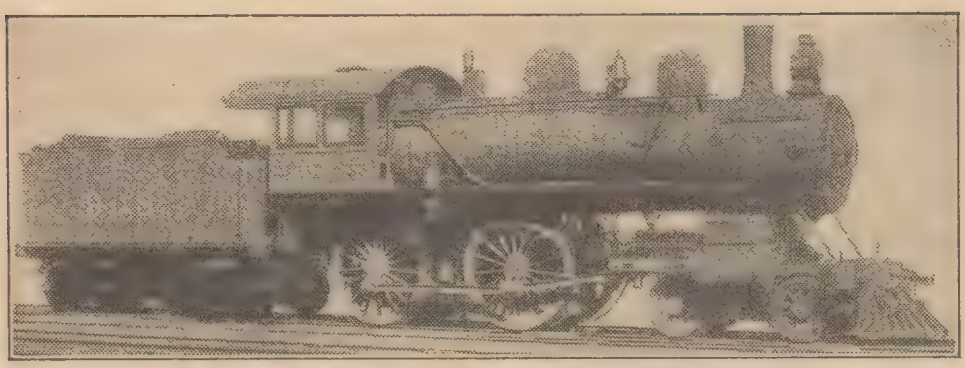
No. 903, built by Schenectady in February, 1892, was equipped with 84-inch drivers, and was known as the Kangaroo. Although not publicized to any great extent, she was far superior in performance to the much-touted 999, which she resembled. The 903 did some very fine running with the "Empire State Express" over a considerable period. Incidentally, the later engines of this famous group were considerably heavier than the earlier ones.

A group of engines like No. 105 of the Grand Rapids & Indiana (page 39), built by Baldwin in May, 1892, are of historical interest. This engine was renumbered 14, and finally Pennsylvania 9540, Class D-39. The bootleg stack was removed in due course. It is of some interest to note that photos of G. R. & I. power are rather rare. Just why this is so is anybody's guess, but it is a fact. The same is true of certain other roads.

Built by Schenectady, December, 1892, Big Four No. 100 (page 42) was one of a class designed by its superintendent of motive power, E. P. Lord. She had 18½x24-inch cylinders, 68-inch drivers and weighed 130,000 lbs., of which 90,000 were on the drivers.

These engines cost Mr. Lord his job. The weight on drivers was too great for the road's right-of-way. Certainly, it was more than that of other American type engines of the period. An attempt was made to use the locomotives, or some of them, by adding a pair of small carrying wheels back of the drivers. Eventually No. 100 was sold to the Lake Erie & Western ("Leave Early & Walk"). What became of the others we don't know. However, truth compels the admission that the design was handsome and substantial. In many respects it resembled the best Pennsylvania practice of the time.

William Garstang designed a very fine class for the road with 20x24-inch cylinders, 72-inch drivers and weight of 126,000



One of the Chicago & North Western's Heavy Eight-Wheelers Built by Schenectady in 1895

lbs., of which 83,000 lbs. were on the drivers. Mr. Garstang used a boiler of the radial-stay extended wagon-top type, with an exceptional amount of heating surface for its size. Later engines of the class had 78-inch drivers. All were built by Schenectady.

The most famous of the American type built by Schenectady with this type of boiler were those for the Chicago & North Western (above), designed in 1895, with 19x24-inch cylinders, 75-inch drivers and weight of 126,900 lbs., of which 79,000 were on the drivers. These were very fast and successful engines, and were followed by a number of various dimensions during the next few years.

"Mother Hubbard" engines of the 4-4-0 type were used on the hard coal roads and a few other lines in the East, but represented only a small percentage of the total.

Various attempts were made to perpetuate the American type, but by 1900 it became evident that the plan could not endure. Trains had got beyond the capacity of the type, and other types were available. The 4-4-0 engines were relegated to suburban and branch line service and now most of them, alas, have been scrapped.

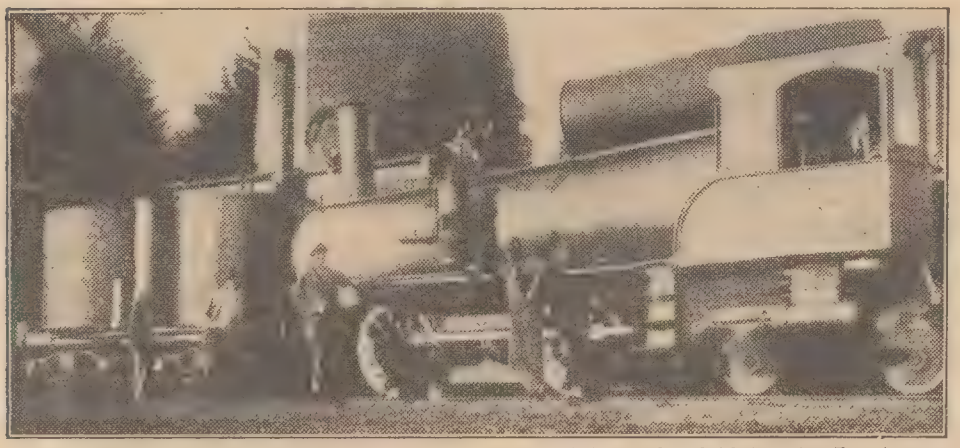
Although They Were Splended Specimens, the Old 100 Class Engines of the Big Four Cost Their Designer His Job. Above Is No. 100, Which Was Later Sold to the Lake Erie & Western

S. P. Photo from H. J. Heany, 411 Scanlan Bldg., Houston, Tex.

One of the Most Famous Eight-Wheelers of the Southwest Was the "Sabine" (No. 5) of Morgan's Louisiana & Texas Division of the Southern Pacific System. Built by the Niles Locomotive Works in 1855. She Hauled the First Through Passenger Train Between New Orleans and Texas. Later She Became No. 505; in 1907 She Was Sold to a Sugar Company; and in 1923 She Was Repurchased by the S. P. and Put on Permanent Exhibition at the S. P. Station in Lafayette, La. She Has 14x22 Cylinders, 58½-Inch Drivers, and Weighs 58,000 Lbs.

For half a century the American had been the favorite, a record that stands today as one of the most interesting in the annals of railroading. Collectors of historical items are always glad to "pick up" photos of this type, whose fascination never ends. The amazing bursts of speed for which this type was noted give luster to its renown; but could not be relied upon in all weathers and under all traffic conditions.

For many years the most sagacious railroad men have realized that reliability is the greatest asset of their business. Hence, the search for locomotive types that would enhance this reputation and protect it against all comers. So the "Eight-Wheeler," as some called it, had to go. It served its time nobly, left records to shoot at and traditions to maintain. It lives in the memories of those who knew it at its best, and is cherished even by younger men who have no personal experience by which to recall it. And, while books and periodicals are published, this romantic breed of the Iron Horse will be remembered with admiration and respect.

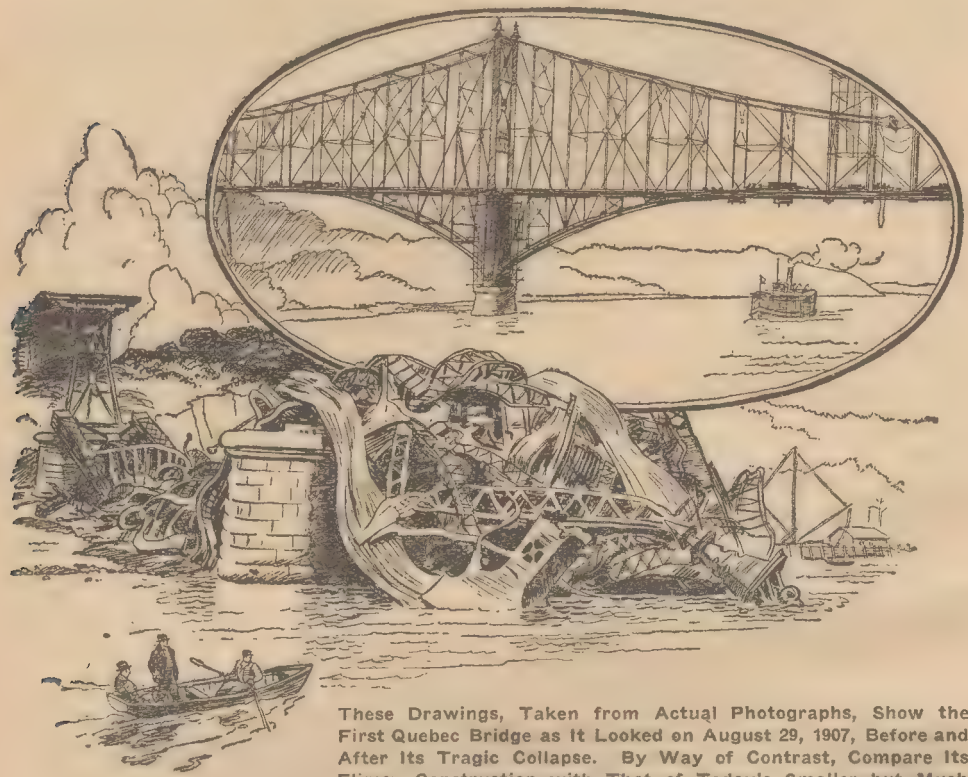


From B. H. Ward, 658 3d Ave., San Francisco

This Peculiar Old Eight-Wheeler, No. 21 of the North Pacific Coast (Now N. W. P.), Was the First Successful Oil-Burner in California. Built in 1900, She Was Named the "Thos. Statson," and Was Equipped with Water-Tube Boiler. Because Oil Could Be Piped from Her Tender to the Firebox, She Was Run Cab Foremost, in the Style of the Modern Southern Pacific Articulated Engines. She Was Scrapped in 1912

TRUE TALES *of the* RAILS

Actual Happenings Told by Eye Witnesses



These Drawings, Taken from Actual Photographs, Show the First Quebec Bridge as It Looked on August 29, 1907, Before and After Its Tragic Collapse. By Way of Contrast, Compare Its Flimsy Construction with That of Today's Smaller but Much Stouter Quebec Bridge, Shown on the Opposite Page

The Bridge Fell Twice

By CHARLES FREDERICK CARTER

"ANY danger from this high wind?" I asked General Foreman Yenser. The bridge was sticking out nearly halfway across the river, supported only at one end, and naturally looked a bit shaky.

We were seated in Yenser's office, a shanty on the river side of the south tower of Quebec Bridge, on the afternoon of Aug. 29, 1907. I was up there gathering material for the old "Railroad Man's Magazine." The general foreman was fidgety, leaning forward, then backward, swinging from side to side in his chair, staring beyond me through the window toward the

This Is the Modern Quebec Bridge, the World's Longest Cantilever Span, Which Carries the Tracks of the Canadian National Railways Across the Mighty St. Lawrence River

great traveler at the outer end of the cantilever arm. Evidently he was paying scant attention to what I was saying.

"What's that?" he asked as he seemed to collect his scattered wits after a pause. "Wind? Certainly not. The wind pressure was calculated and provided for as it is in planning a skyscraper."

"But the Tay Bridge* was blown down with a trainload of passengers. Not one escaped."

"Oh, well! That was twenty-eight years ago. A lot has been learned about bridge design since then. Sorry, but I must beg you to excuse me. I've got to hurry out on the bridge. Good-by."

With that Yenser arose and hurried out. I was glad to start for solid ground, 200 yards distant. On the way, as a climax to a most uncomfortable afternoon, my hat blew off and went sailing into the river beyond hope of recovery.

Instead of being thrilled as I had expected to be in treading the partly-built Quebec Cantilever Bridge, much the largest bridge of its kind ever planned up to that time, I had been oppressed by a feeling of uneasiness. If it wasn't a premonition of disaster it was a very good substitute therefor. The vast structure was overwhelming in its immensity. The wind sweeping downstream made walking difficult. Everybody seemed preoccupied. Yenser, in particular, seemed anxious to get rid of me. He was civil, to be sure, but no more.

Reasons for this apparent lack of courtesy developed later. At the hotel in the City of Quebec, nine miles down the St. Lawrence, news had just been received that the south half of the bridge I had left less than three hours before had collapsed. Yenser, with whom I had been talking, and 81 other men were now lying on the bottom of the St. Lawrence, pinned down under 200 feet of water by 19,000 tons of bent and twisted steel. Six other men, all badly injured, had been rescued from the water.

Instead of being discourteous, Yenser had

* *See June, '34, issue of* RAILROAD STORIES.

really saved my life by shooing me off the bridge before the disaster happened.

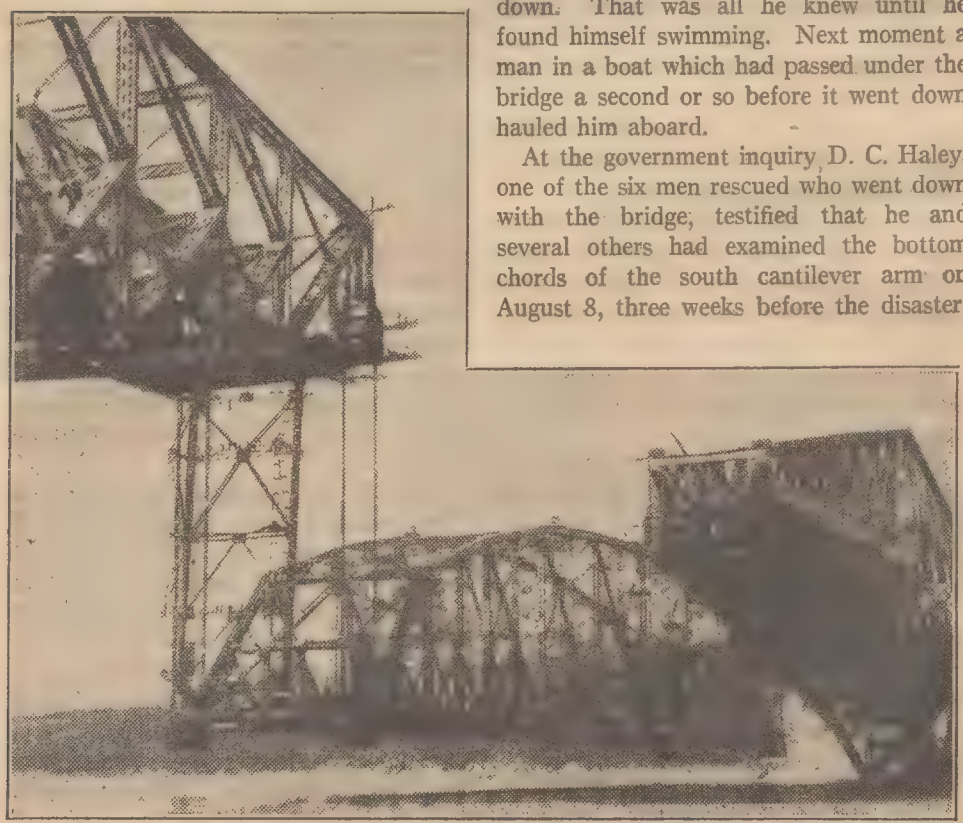
If I had not been in such a hurry to get away after reaching the trolley station I might have seen the most fearful disaster in the history of bridge building. The only witnesses were workmen on the north arm of the bridge across the river, who were startled by a report like a cannon shot, followed by groaning and grinding. Looking toward the south arm, they saw it slowly sinking, making all those strange noises as it sank. Its movement speeded up until the structure was within 35 feet of the water, when it all collapsed at once.

IT turned out later that the disaster was not an unforeseeable act of God. On the contrary, the bridge had been given ample warning that trouble was coming. Nearly every man employed on the bridge had known that all of them were flirting with death.

Oh, yes, there was one witness on the south end. He was on the anchor arm; that is, on that part of the bridge between the main tower and the approach span. When he felt the structure sinking beneath him he ran for his life, climbing a steeper and steeper grade at every step, for the span sank first at its outer end. Safe on the approach span, which did not fall, he turned just in time to see the cantilever arm drop into the river.

Bert Hansen, engineer on a locomotive pushing a carload of steel out within reach of the traveler, did not see anything. He only felt the bridge sinking under his feet. He shut off and applied the air, but his engine kept right on going out toward the end of the span at the same time sinking down. That was all he knew until he found himself swimming. Next moment a man in a boat which had passed under the bridge a second or so before it went down hauled him aboard.

At the government inquiry D. C. Haley, one of the six men rescued who went down with the bridge, testified that he and several others had examined the bottom chords of the south cantilever arm on August 8, three weeks before the disaster.



The Great 640-Foot Central Span of the Quebec Bridge Being Successfully Raised to the Cantilever Spans on Sept. 19, 1917, After a Sensational Failure the Year Before (See Photo on Opposite Page, Showing the Second Quebec Bridge Disaster)

Still Recalling Vividly the Disaster at This Very Spot Nine Years Before, Ten Thousand People Came, on September 11, 1916, to Watch the Center Span of the New Quebec Bridge Being Hoisted into Place. This Is What They Saw. A Moment Later the Placid St. Lawrence Closed Forever Over 5,400 Tons of Bent and Twisted Steel

Several places were found where the lattice work was bending or showing other signs of distress.

Again, on August 28, the day before the tragedy, he had helped in another examination. This time the lattice in Section A9L was found to be twisted into the shape of the letter S.

Yenser was frightened, but he was only a foreman. All the engineers at the bridge site and at the Quebec office were called into consultation.

"Why don't you let me take down the traveler (weighing a thousand tons and working at the tip of the cantilever arm) and get that load off before putting more steel on?" asked Yenser.

"If you condemn Section A9L," said A. H. Birks, resident engineer and inspector for the Phoenix Bridge Co., which was furnishing and erecting the steel, "you condemn the whole bridge."

Everyone realized that, but none had the courage to condemn a job which already represented an investment of $1,500,000. Birks, in fact, seemed so confident that nothing could happen that next day he rode the car of steel which Hansen was pushing out to the traveler. He went down with the bridge and never came up.

The net result of the conference was decision to notify the home office at Phoenixville, Pa., of conditions, and await orders, meanwhile continuing work. The engineers might have sent a telegram; but a strike of telegraph operators was then on. It did not occur to anyone to telephone; for 28 years ago the use of the telephone was not so widespread as it now is. Instead they decided to send a messenger.

W. R. McLean, a young engineer, inspector for Theodore Cooper, consulting engineer of the bridge, was dispatched to New York to report to his chief and continue to Phoenixville if the chief approved. McLean waited until evening for a train to New York, while death for the bridge crew crept steadily nearer.

When McLean reached Cooper's office the consulting engineer had not appeared. And when Cooper did arrive he greeted McLean and went on into his private office where fussed with his mail for some time before it occurred to him that his inspector might have important reasons for coming down from Quebec. When at last McLean was given an opportunity to tell his news, Cooper realized its gravity. Seizing a telegraph blank he wrote this message to the Phoenix Bridge Co.:

> Add no more weight to bridge till after due consideration to facts.

McLean was instructed to continue to Phoenixville to explain the facts about conditions at the bridge. Owing to the strike the telegram was not sent until 12.25 P.M. When it was received at the Phoenix

This Photo of the Entrance to the Present Quebec Bridge Gives You Some Idea of Its Strength and Massiveness. The Builders Took No Chances This Time!

Bridge Co.'s office, General Manager Dean was not in, so it lay unopened on his desk. Dean did not return until 5 P.M. McLean had not yet arrived; but that didn't matter, for Yenser, the only man who had sense enough to comprehend fully the danger threatening, was lying with 81 others at the bottom of the river.

Quebec Bridge was not blown down like the one across the Tay in Scotland, carrying down a passenger train with passengers and crew on the stormy night of December 29, 1879, though possibly the high wind August 29 may have been the proverbial last straw which precipitated the disaster. The real cause was bad design and inadequate supervision. "London Engineering" declared, editorially: "A ridiculously small sum was set aside for professional advice. An adequate scientific staff was impossible."

The Royal Commission of Inquiry, which conducted the post mortem on the disaster, found the bridge to be twenty per cent heavier than contemplated in the stress sheets. "Such an over-run of dead weight in a structure whose own weight constituted by far the largest part of the load it had to carry was unavoidably fatal."

Theodore Cooper, consulting engineer, was conceded to be the foremost authority on bridges of his time. He devised the Cooper formula for computing locomotive axle loads almost universally used in figuring stresses in railroad bridge design.

Although he was slated to receive a salary of $7,500 a year, he did not get it. His salary was reduced one half while the other half wasn't paid. He maintained an inspector at the bridge and did necessary office work on the job at his own expense. Even at that, he was obliged to act practically as chief engineer as well as consulting engineer.

NOTHING could be saved from the wreck of the south half of the bridge —not even the concrete pier, though to all appearances it was undamaged. The old design was sold for waste paper and new men started from scratch to design a bridge that could stand up under its own weight —the first structure had given way under less than half the weight it would have had to bear if it had been completed—and also carry loaded trains.

Original plans called for two railroad tracks, two highways and two footpaths. First to be eliminated was the highways; in those unsophisticated days the science and art of railroading had not reached a point at which managements spent millions for trucks and buses to compete with their own trains.

All members of the new bridge were strengthened. This, of course, increased weight, of which the Royal Commission had complained. The difference was that the weight was more wisely distributed.

The Quebec Bridge is 3,239 feet long, of which 1,800 feet is in the river span, 150 feet above mean high water. Its main towers are 515 feet high. Each one is composed of 1,500 tons of steel resting on steel shoes 22 by 26 feet and 19 feet high. The cantilever arms project 580 feet from the north and south piers and are connected by a suspended span 640 feet long. The complete bridge contains 66,000 tons of steel.

Nine years elapsed from the date of the first disaster until a crowd of 10,000 persons, including most members of the Canadian Society of Engineers, the American Society of Civil Engineers and other notables assembled, Sept. 11, 1916, on steamboats and other craft, and on both shores of the St. Lawrence, half a mile wide at the bridge site. There they were to behold the feat of lifting a bridge span 640 feet long, 100 feet high and weighing 5,400 tons from the level of the water 150 feet into the air and connecting it with the cantilever arms, thus linking up what was still the largest bridge the world had yet seen.

The suspended span had been built on false work over the water at Sillery Cove, six miles below the bridge. Six scows were floated under the span at low water. When the tide rose the scows lifted the span off its scaffolding, and floated upstream.

To the accompaniment of a vast amount of cheering the flotilla maneuvered exactly as planned. The hoisting chains were connected and as the tide fell the scows floated out from under the span, leaving the suspended structure swinging clear, to the awed delight of the cheering multitude. Collective throats almost split when, after a pause, the span began slowly to rise.

But the span moved upward less than two feet when one corner slipped out of its "chair," a steel trifle 20 feet long, three feet wide and seven feet deep, whereupon the span made a corkscrew nose dive into the St. Lawrence, where it still reposes.

Cheering ceased. Big shots among the engineers and politicians went into a huddle with the engineers of the bridge company and the contractors for a second post mortem on a bridge disaster. This time only one man was killed and six injured.

BY this time the World War had reached a critical stage. The big bridge was needed as a part of the road to the sea for supplies for the armies in Europe. There could not be another wait of nine years before making up for the second mishap. As a matter of fact, before the crowd dispersed it had been decided to begin work on another suspended span to replace the one lost in the river.

Immediately the mills were wired to fabricate new material at once. The only change in specifications was to make most

of the parts of nickel steel, which saved more than 400 tons in weight.

Erection was begun on the old falsework in Sillery Cove. Ten and a half months were required to duplicate the suspended span. There was a brief wait for favorable tide and wind.

At last, Monday, Sept. 17, 1917, the same old 6 scows were run under the span. As the tide rose, it floated clear at 5.47 A.M., and the flotilla started for the bridge, exactly as before.

But this time there was a serio-comic variation in the program. Father McGrath, the village priest at Sillery, realizing that the hoodoo would have to be laid if Quebec Bridge was ever to be completed, appeared on the scene, climbed aboard the span and blessed it. Then he rode up to the north arm and blessed that, ferried across to the south arm and blessed that.

Then he returned to the north arm where he mounted guard on the jacking platform, determined to see that the hoodoo did not sneak behind his back to resume its evil work.

As before, a great crowd had assembled to see so novel an engineering feat, but not a cheer was heard, not even a loud voice in conversation. In utter silence the multitude saw the seven tugs maneuver the span into position so it could be made fast to the mooring piers let down from the bridge.

Every movement had been well rehearsed. Quickly the lifting chains were hooked on. In a few minutes, so well had operations been timed, the scows floated clear.

Eight hydraulic jacks had been arranged in pairs on platforms on the ends of the cantilever arms, each pair over a corner of the suspended span. They were operated from a central control platform with telltales connected with each jack so the operator could see at a single glance that every jack was doing its duty.

"Chains" from the jacks ran down to corners of the suspended span. They were unlike any chains ever seen before. They consisted of steel slabs 32 inches wide, 26 feet long and slightly less than an inch and a half thick arranged in pairs to form each link, held together by 12-inch pins.

Each lift required about a quarter of an hour, of which only five minutes were needed for the actual hoist, the rest of the time being taken up in reversing the jacks and taking a fresh grip and uncoupling the chain links that had served their purpose.

The chain was closely followed by screw jacks of ordinary pattern, but of enormous size to guard against accidents to the hydraulic pumps and jacks; and also to bear the burden while the lifting jacks were getting a fresh hold.

Between lifts the crew stood around looking busy and smoking cigarettes. It was all so simple; for the hard work had been done at the office by engineers. All hands knocked off at regular meal hours and when the whistle blew at night.

Three days were required for this leisurely, if difficult, job. On September 20 the suspended span rose until its floor was exactly level with that of the cantilever arms. Half a dozen men swinging a short rail drove the pins into place with a few light taps, coupling up the bridge.

As the last pin was driven at 4.01 P.M. the foreman at the northwest corner of the suspended span lifted his right hand and shouted:

"Right, here!"

Instantly every whistle on the river began bellowing in a wave of sound which rolled reverberatingly down until it reached Quebec, where, by order of the mayor, every whistle, bell and auto horn in the city joined the chorus.

Father McGrath heaved a sigh of relief and started for home; for the hoodoo had been laid. Who can deny he did it?

At all events, after more than eighteen years of faithful service in war and in peace, Quebec Bridge still spans the St. Lawrence. I never see it without thinking of that day, nearly twenty-nine years ago, when I narrowly missed being an eyewitness of the first collapse of "the bridge that fell twice."

"Let 'Er Blow Up!"

By MEL LEWIS
The Hoghead Evangelist of Terre Haute, Indiana

IT happened on the St. Louis division of the Pennsylvania R. R. 'way back in 1900. No. 22 was a preferred freight run made up of perishables which started from St. Louis and was scheduled through to markets in the east. The engines and crews changed at Terre Haute, Ind.

I was firing for Jim Jacobs (which, by the way, is not his real name) and we were called at Terre Haute for the run. One of the worst old battleships on the line was chalked on the board beside our names—No. 35, which, by all that was reasonable, should have been out of service for a back shop overhauling instead of perking out on this red ball.

Naturally, neither the hogger nor myself felt like asking a blessing upon her. When No. 22 arrived we coupled on, pumped up the train line, and tested the brakes. When the conductor handed us a clearance, Jim tipped her over and stretched the slack in the train; and out of the yards the old 35 wheezed and coughed.

I always thought I could get as much heat out of the black diamonds as any tallowpot on the road, but that old 'gine wouldn't steam no matter how I fed her. Jim would favor me with the injector while pulling up the hills. On the down side he'd shut off steam and throw a full stream of water into the boiler, while I'd shake her grates and turn on the blower wide open. But with all this careful nursing, the 35's temperature would not stay at par.

We barely snaked the train up to Greencastle to take water. While the head brakeman did this stunt, I pulled clinkers, shook the grates, baled in a fresh fire and opened the blower.

It was a good half mile over the climb, so when the steam gage showed about two hundred, and the water in the boiler registered nearly the top in the glass, Jim whistled off and the 35 gave a raspy cough, turned a slip or two of its drivers, and then began to drag the train away from the tank.

Near the top of the slant I glanced at the water glass. The water was bobbing down at the bottom. "Hey, Jim, look at that!" I yelled.

He squinted at the glass and casually asked, "What about it?"

"What about it! Where's all the water gone? You've had the injector on all the time, haven't you?"

"Y-e-h," he drawled.

"She shouldn't have used that much water in this short pull. You'd better try the gage cocks." I was getting nervous.

"I wouldn't do 'er the honor," tartly. "Let 'er blow up. The sooner the better. If they don't know enough to pull an old crate like this out of service, well—" and Jim finished with a volley of full-rounded expletives in the raw.

When we tipped over the slope and Jim cut her back the water dropped out of sight in the glass. Never once did he try the gage cocks. On we chugged, and between fires I would squint at that empty water glass.

Running over about twelve miles of

level track, we pulled up for want of steam at Coatesville. I shook her down, threw in a fresh fire, put the blower on wide and dropped down on the ground to get a drink of water from a nearby well.

I had just touched the rim of the cup to my lips when a deafening explosion socked my ear drums. I never took the drink. Whisking about, my startled gaze beheld the old 35 in an envelope of fog with a screen of red jetting from beneath. I rushed back and shinned up into the cab. "What the devil—" I panted.

"Dunno," calmly answered Jim as he lifted the torch from its hanger. He swung open the fire-door and ashes and cinders spilled on the deck. Lighting his torch he flicked it back and forth on the inside of the firebox, whose interior was as dark as a cave. Not a vestige of fire was there. Jim crawled through the open door into the firebox and the grates were as clean as if they had been swept. I peeked in while he held his torch up to the crown sheet. That told the story. Jim counted the holes in its sag. Twenty-six crown bolts had let loose! Jim had got his wish—the 35 had blown up.

Needless to say, Jim never ran that engine again, nor any other engine on that line. I wouldn't be writing this narrative, either, had I held that firebox open a moment longer. That drink of water which I did not drink saved my life.

'Boes Are 'Boes

That's What Bulldog Cameron Swore They Were—Until a "Young Whelp" Challenged Him

By EDMUND E. PUGSLEY

Freight Conductor, B. C. E. Ry.; Author of "Lace for Lena," etc.

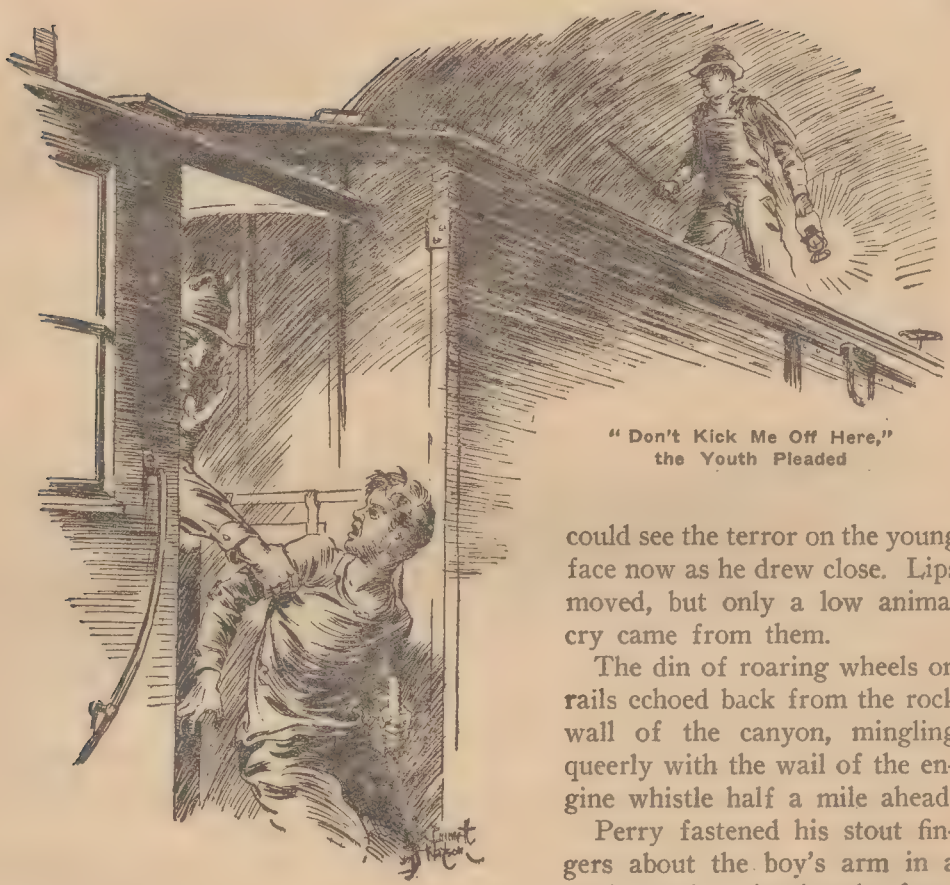
FLAGMAN PERRY sat in the caboose cupola watching a lantern as it bobbed along the tops of the swaying cars in the dusk of a chill November evening. Between the lantern and himself Perry could see occasional shadows dodging down ladders or disappearing between car ends.

The flagman cursed softly. "Bulldog's never happy unless he's kicking off some poor bum," he murmured. "Why can't that guy leave 'em alone? It'd serve him right if they gang him one night."

Steadily the lantern worked back toward the rear. It stopped at each car end while the bulky conductor, Bulldog Cameron, flashed his light down between, or climbed down himself to urge an unwilling clinging figure out and off into the night.

Perry couldn't make out Bulldog's face, but he heard the threats that preceded the frantic leap of each hobo thus forced to risk his limbs on the uncertain gravel or rocks of a winding canyon railway.

Occasionally the flagman made out a sprawled form as the train rumbled by, or a figure gathering his broken bundle together, with an angry fist



"Don't Kick Me Off Here," the Youth Pleaded

shaking toward the vanishing cars. Once a stone crashed through the cupola window. Flying glass narrowly missed his face.

"Go to it, kid!" he muttered, ducking down. "Darned if I wouldn't do the same thing myself in your place."

Bulldog's lantern came on and on. It reached the second car from the caboose. Perry thought he saw a shadow dart along the running board and plunge down an end ladder. With sudden resolve he scrambled from the crow's nest and ran to the front door. Down on the lowest step he made out a slim body flattened tight against the car in the shadows, wide-open eyes reflecting light from the lamp inside.

Perry reached across and down. He could see the terror on the young face now as he drew close. Lips moved, but only a low animal cry came from them.

The din of roaring wheels on rails echoed back from the rock wall of the canyon, mingling queerly with the wail of the engine whistle half a mile ahead.

Perry fastened his stout fingers about the boy's arm in a steely grip developed from years of ladder climbing and handbrake winding.

"Don't kick me off here!" the youth pleaded. "I'll be killed sure. Let me ride to the next stop and I'll get off. I swear I will!"

ACROSS the car roof came the flicker of Bulldog's lantern. Perry leaned his head close to the boy.

"Quick, kid, come on across!"

He stepped back himself and jerked the boy behind him. Above the clank of wheels he could hear the thump of the conductor's heavy boots on the running board almost above them.

Perry thrust the bewildered lad in through the caboose door, and he followed, slamming the door. A couple

of leaps and he had the little door of the "dope" locker open.

"Hustle, kid, in here!" said Perry. "It's your only chance."

He pushed the stooping form in and slammed the door, whirling about to the rear. When Bulldog Cameron came in, Perry was dusting his hands.

"I got 'em all but a couple," Bulldog rumbled. "One of 'em came back this way. I missed him. He's as slippery as an eel. Did you see him, Perry?"

The flagman nodded. "Yeah. I got him. But I don't like it. I don't see why you keep chasing drifters all the time, Bull. They ain't hurting anything."

"What! Let them damn parasites ride for nothin'? Not on my train, they don't! I'll break their necks! Why don't they go to work?"

Perry laughed grimly. "That's just what they're looking for."

"Lookin' for work?" the conductor snorted. "You're crazy! They're tryin' to keep away from it, that's what. I bet you ten dollars there ain't one in a hundred of them ever did an honest day's work since he left school."

Perry nodded, taking the coffee pot to fill from the water can. "I won't argue with you on that statement, Bull," he said. "But I'll double that bet if you can get a job for one of them, and then find the boy that won't take it."

"Nobody ever got me a job," Bulldog growled. "I had to go out and rustle my own."

Perry placed the coffee pot on the stove, stirred up the fire, then turned to where the big conductor was writing at his desk.

"Look here, Bull," he asked, "just supposing one of them boys back there was your own—how'd you like it?"

Bulldog grunted, said nothing.

"By the way," Perry went on, "how's that boy of yours getting on since he left home? About a year ago, wasn't it?"

The conductor turned a grinning face to his flagman. "Say, now, there's a boy what knows how to get along in the world. Bert got a job in Calgary in less'n a week."

"Good!" Perry exclaimed. "I'm mighty glad to hear it."

THE conductor resumed his writing. Perry packed his pipe, pulled out a chair, and went on talking:

"If it was me, now—say, my kid's still in school, but sometimes when I see these poor lads kicked about on the freights I get to worryin'—there's so little for a boy to look forward to nowadays—"

Bulldog snorted. "Aw, hell, Perry! This is only a lull in business. It'll come back. But these here 'boes, now—they're just natural drifters. They don't want work. Me an' you, we've seen many a hard time, but we could always find work if we looked for it."

The flagman sucked his pipe in silence. The little red caboose rattled along down the canyon. Up ahead, the 2703 whistled and slowed. Bulldog pulled out his watch.

"Taking water," he said. "Skin up an' give that gas tank the once over. I'll watch behind."

Perry started forward, forgetting entirely the young fugitive he had shut in the dope locker.

Bulldog Cameron glanced back at the bright red block signal and went on with his wheel report. Later he heard the engineer whistle off. He got up and strode to the door to wave a lantern highball. Then he returned to his writing.

The caboose lurched ahead. Bulldog cursed softly as his pencil tore through the thin paper. Behind him he heard the door open.

"How'd you find that journal, Perry?" he queried, without looking around. "Gettin' any hotter?"

There was no reply. Bulldog presently twisted in his chair. Instead of seeing his flagman, he found himself staring into the hungry, defiant eyes of a gaunt youth in ragged sweater and worn overalls. The big conductor rose.

"You young whelp!" he growled. "Didn't I kick you off twenty miles back?"

The youth's face was white, his jaws set hard. "You tried to, mister," the lad replied, "but I'm still here."

Bulldog's legs straightened and he stood towering to the ceiling. "Well, this time you don't get away with it," he rumbled, reaching out a long arm.

The transient stepped backward till his lean hand contacted a heavy air hose wrench. He gripped this tightly.

"Better keep back!" he threatened. "I'm stayin' on — till the train stops!"

Bulldog laughed harshly. "Ho, ho! That's a good one!" He moved a step closer to the youth, but the hand on the wrench came around and swung it high.

"I warned you, mister, and I mean it! I'm hungry. All I want is a bite to eat. If you're too stingy to give me that, then I'm riding to some place where I can get it."

The conductor stared curiously at this new type of defiance. Never before had a slender kid challenged him like this. There was something in those eyes, gleaming in the light from the desk lamp, that caused him a twinge of uneasiness—something unusual in his hard bluff tone. It reminded Bulldog of what Perry had been harping on.

"I'll wrap that around your neck," he stormed. "Gimme that thing!"

But he didn't quite do it. Neither one had noticed the little door of the dope locker stealthily open near the other end of the car. A sharp voice split the air above the din of the train, and both men whirled. . . .

WHEN Flagman Perry entered the front door of the little red crummy about fifteen minutes later, he stopped short to stare at the scene.

Seated at the collapsible table were two gaunt, downy-faced youths, obviously hoboes, though both were now freshly washed and their hair was combed back. One of them he recognized as the lad he had hustled into the locker.

From the faces of the guests, Perry looked to the heaped-up plates before each. Bacon and eggs and fried potatoes were being forked smartly into wide mouths.

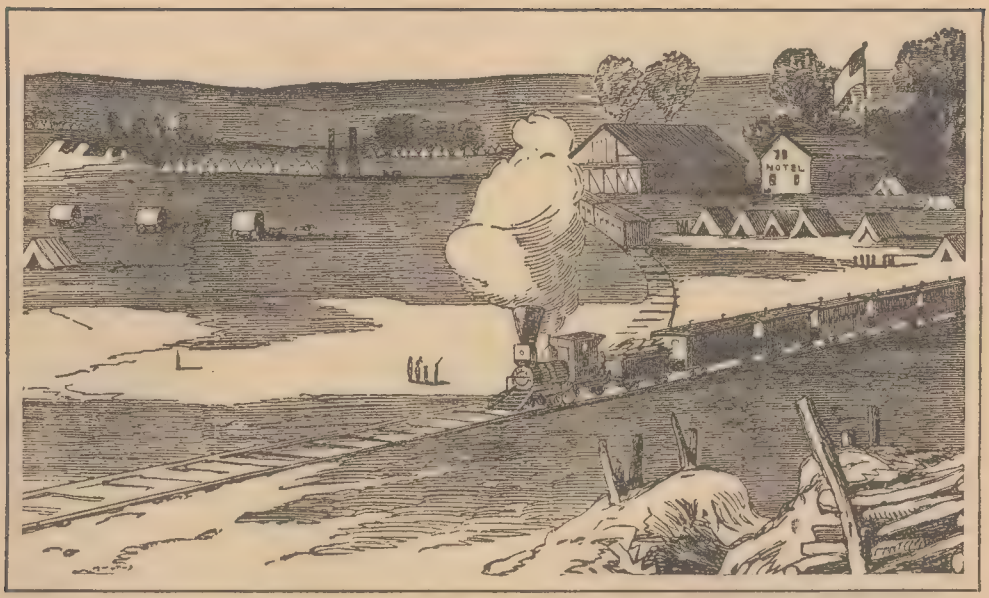
As fast as the pile of food on the plates was lowered, it was replenished by a burly waiter, none other than Bulldog Cameron!

"Hey there, Bull!" Perry called out. "What's the idea of wasting perfectly good chow on a coupla bums? Those eggs cost four bits a dozen!"

Bulldog gave a wide wholesome grin. "It's all right, Perry. These here boys are not reg'lar 'boes—"

"'Boes are 'boes, you said," the flagman retorted.

"Yeah, I know what I said." He flipped another pair of eggs into the sizzling pan. "But you see—well, these kids are just sort of goin' home. This —this big feller here is my son, Bert, I was tellin' you about. An' this—this young scrapper here is his buddy, Stan Kirkendahl. Have more coffee, Stan?"



Old Print from Collection of Fred Westing, Jersey City, N. J.

Commissariat Depot of the U. S. Army at Manassas, Va., in Civil War Days

February in Rail History

IF you wish to know what happened on your birthday or any other day, consult this almanac. It began in our April, '35, issue and will end next month. Many readers contributed dates; thanks!

February 1

1876—High-water mark of narrow-gage railroads in North America. Figures show 2,687 miles of them in operation in 26 states and Canada, and 7,973 more miles projected.

1901—Union Pacific buys control of Southern Pacific, making E. H. Harriman one of world's foremost railroad magnates.

1905—Uintah Ry. completed between Mack, Colo., and Watson, Utah, 68½ miles, 3 ft. gage. (Details in Jan., '33, issue.)

February 2

1827—Public meeting at Baltimore, Md., is first move toward planning for B.&O. Railroad. (Now 6,295 miles.)

1830—First meeting of directors of Pontchartrain R.R., first road chartered west of Allegheny Mts. (Became part of L.&N., now abandoned. See article by Earle Davis, Oct., '33, issue.)

1870—Walker D. Hines born at Russelville, Ky. (Succeeding Wm. G. McAdoo, he served as U. S. Director General of Railroads from June, 1920, to Oct., 1921.)

February 3

1843—Wm. C. Van Horne (Canadian Pacific Ry. builder) born near Joliet, Ill. (See article by C. F. Carter, Aug., '35, issue.)

February 4

1832—First American street car line begins operation on the Bowery ("the street of a thousand sins") in N. Y. City, with horse-drawn cars on iron rails.

1886—Province of Buenos Aires, Argentina, grants concession for construction of horse tramway between Almagro and Villa de Colon. (In Sept., '91, the road was changed to steam power, and in Oct., '06, it was taken over by Buenos Aires Central Ry., which now operates over 300 miles of standard-gage track.)

1887—Act to Regulate Commerce, passed by U. S. Congress and approved by the President, establishes Interstate Commerce Commission.

1889—Canadian Pacific opens its Windsor St. station in Montreal. . . . Oahu Ry. & Land Co. inc. in Hawaii under 50-yr. franchise to build and operate 3 ft. gage line. (Now 102½ miles. Details in May, '35, issue.)

February 5

1853—West Jersey R.R. chartered. (Opened in 1857, 128 miles, between Camden and Cape May, N. J.; now part of P.R.R.)

1887—Part of train plunges through bridge over

White River near Woodstock, Vt.; 38 perished, many wounded.

February 6

1871—Pacific Express on Hudson River R.R. collides with derailed oil car at bridge over Wappinger's Creek near New Hamburg, N. Y., wrecking passenger and freight trains, exploding oil tanks and destroying bridge; 22 killed, many injured. (Details in July, '34, issue.)

1906—M.K.T. train beats Cotton Belt Line and Mo.P. in race for U. S. mail contract between St. Louis, Mo., and Dallas, Texas.

1908—Pennsylvania Flier, running 60 m.p.h to make up lost time, is derailed at ice-covered crossing near Franklinville, N. Y.; engine crew leaps to safety; 3 killed, 9 injured.

February 7

1882—Opening of Metropolitan Elevated Ry. in Berlin, Germany. Built by Govt. at cost of $2,300,000 per mile. (Was steam and electric, now only electric.)

1902—Phila. & Reading R.R. train makes 90 miles in 84 minutes, carrying J. P. Morgan and other notables from Phila. to N. Y. City.

1904—B.&O. general office bldg. destroyed in big Baltimore fire.

February 8

1830—Subscription books opened for Lexington & Ohio R.R., second railroad built west of Allegheny Mts. (Now part of L.&N.)

1855—First passenger train leaves Halifax, Nova Scotia.

1864—Atchison & Topeka R.R. gets land grant of 3,000,000 acres.

1883—Maine's first railroad, the Bangor, Oldtown & Milford, is chartered. (Now Maine Central, 1,046 miles.)

1898—Arizona Eastern Ry. (now part of S.P.) makes treaty whereby Indians ride free anywhere between Bowie and Globe, Ariz., for 30 years.

February 9

1843—J. R. Wood born at Auburn, N. Y. (Became head of P.R.R. passenger traffic in 1881. A few years later he placed in service the first limited train, 7 Pullman cars and locomotive No. 1651, American type, between Phila. and N. Y. City. She made record run of 90 miles in one hour and 56 mins. On some trips the limited was hauled by an English loco. to please the many British stockholders of P.R.R.)

1851—Opening of Sweden's first railroad.

1866—Venezuela's first railroad opens.

1875—Fitchburg R.R.'s Hoosac tunnel completed, 4¾ miles long. (For over 50 yrs. it was America's longest railroad tunnel, exclusive of the N. Y. subways.)

1880—Atchison, Topeka & Santa Fe Ry. reaches City of Santa Fe, N. M.; last spike driven by Gov. Wallace.

1897—Oregon Short Line R.R. inc. in Utah. (Acquired 2,505 miles of main line track; now part of U.P.)

February 10

1845—Atlantic & St. Lawrence R.R. chartered. (Opened in 1853, built 155 miles, acquired by Grand Trunk Ry., now part of C.N.R.)

1851—Illinois Central chartered to build first trunk line railroad in Mississippi Valley. (Now 6,867 miles in 14 states.)

1875—C. F. Kelley, president of the 69-mile electric Butte, Anaconda & Pacific Ry., born at Mineral Hill, Nevada.

1907—Southern Pacific R.R. closes gap in Colorado River, ending disastrous flood and saving Imperial Valley of California, famous fruit-growing section, at cost of $3,000,000.

1935—Pennsy inaugurates through electrified passenger train service between N. Y. City, Phila., Baltimore and Washington, when streamlined engine pulling southbound "Congressional" leaves Penn Station, N. Y., at 4.30 P.M., and northbound "Congressional" leaves Union Station, Wash., at 4 P.M. This virtually completes world's greatest railroad electrification. Pennsy now has 1,974 miles of electrified track, more than one third of the total electrified track in U.S. (See page 136.)

February 11

1859—Atchison & Topeka R.R. chartered by Territory of Kansas. (Santa Fe System total mileage today, 13,300.)

1874—Name of Milwaukee & St. Paul Ry. changed to Chicago, Milwaukee & St. Paul. (Now C.,M.,St.P.&P., the Milwaukee Road, now 10,800 miles, 656 of it electrified.)

1903—Atlanta Terminal Co. inc. in Georgia to operate Union Terminal at Atlanta.

1849—Peoria & Oquawka R.R. (one of the roads from which the C.B.&Q. sprang) chartered in Illinois. (Burlington System now 9,037 miles.)

February 12

1871—N. Y. City Fire Dept. makes its first journey out of the state to help fight $100,000,000 fire at Baltimore, Md. Apparatus loaded on special train of flat cars.

1901—Washington Terminal Co. inc. to operate Union Station at Washington, D. C., with 54 miles of track.

1924—German National Ry. Co. is founded, taking over the world's second largest rail system. (See article by E. J. Baker, Dec., '35, issue.)

1929—Vatican Railroad (said to be world's shortest) authorized by treaty with Italian Govt. (Details in Jan., '35, issue.)

February 13

1836—First 19 miles of Richmond, Fredericksburg & Potomac R.R. opened between Richmond, Va., and South Anna River. (Road now 118 miles long.)

1859—Hannibal & St. Joseph R.R. (now part of Burlington System) completed. Golden spike

driven near Chillicothe, Mo. It was started in 1846 with public meeting held in law office of John M. Clemens, Mark Twain's father, at Hannibal, Mo. (World's first railway mail cars later passed over this road.)

1874—H. W. Stanley, president of 296-mile Tennessee Central Ry., born at Petersburg, Va.

1879—First passenger train enters New Mexico.

1891—Bangor & Aroostook R.R. organized. (Now 598 miles.)

February 14

1863—Toledo, Peoria & Warsaw Ry. chartered. (Opened Oct. 14, 1868. Later became T., P. & Western. Now 239 miles. See article, "The Chatsworth Wreck," N. A. Critchett, June, '35.)

February 15

1845—First of Ross Winans' 22-ton engines put in service on B.&O.

1851—St. Louis, Jacksonville & Chicago R.R. chartered. (150 miles, opened in 1855, became part of the Alton, now B.&O.)

1852—First P.R.R. train runs from Phila. to Pittsburgh, Pa., without using inclined planes of old portage road.

1897—Fast run. Burlington train leaves Chicago at 10 A.M., with Henry J. Mayham on Gen. Supt. Hessler's private car racing to bedside of dying son. Trip to Denver, 1,026 miles, is made in 18 hrs. 52 mins., despite snowstorm, although fastest regular train takes 32 hrs. However, Mayham arrives 2 hrs after son's death. Race costs him $1,000.

1926—C.N.Rys. inaugurates service between Kamloops and Kelowna, B. C., Canada.

February 16

1865—Cairo & St. Louis R.R. chartered to build 146½ miles of narrow-gage between St. Louis, Mo., and Cairo, Ill. (Now part of 1,202-mile Mobile & Ohio R.R.)

1881—Canadian Pacific Ry. inc. in Canada. (Total mileage now 17,243.)

1911—S.P. special train leaves Yuma, Ariz., with private car of Chas. G. ("Bet You a Million") Gates, N. Y. broker, suddenly taken ill, and with buffet car and 3 coaches for ballast. (Made record run to N. Y., about 3,000 miles, at cost of $6,000, $2 per mile, or $2 for every minute the special was on the rails. Run from Chi. to N. Y., 975 miles, took 16 hrs. 27 mins.)

February 17

1831—Philadelphia, Germantown & Norristown R.R. chartered in Penna. (First Baldwin engine ran on this road, 34 miles, which was opened Aug. 15, 1835, and leased from Dec. 1, 1870, to Phila. & Reading Ry.)

1855—First train runs on Panama R.R. from Aspinwall to Panama, 47½ miles. (First transcontinental railroad. Now 92 miles.)

February 18

1836—Chesapeake & Ohio Ry. chartered as Virginia Central. (Consolidated Aug. 31, 1868, with Covington & Ohio R.R., total 428 miles; opened throughout, Jan., 1873. Now 3,143 miles.)

1869—Opening of first railroad in Greece.

1913—Tampico-Panuco Valley Ry. organized in Mexico, mainly as an oil line. (Now 164 miles.)

1927—President Coolidge of U. S. touches button setting off 124 shots of dynamite, the last rock wall in Moffat Tunnel near Denver on D.&R.G.W.

February 19

1871—Opening of Tasmania's first railroad.

1881—Harlan J. German, president of 57-mile Montour R.R. in Penna., born in Nebraska.

1903—Congress passes and President T. Roosevelt signs Elkins amendment to Interstate Commerce Act forbidding rebates on railroads.

February 20

1840—Locomotive "Gowan & Marx" on Phila. & Reading Ry. makes record run of 54½ miles in 5½ hrs., averaging 9.9 m.p.h., with assistance of pusher on heavy grade. Runs from Columbia Bridge, Pa., with train of 80 small 4-wheel cars. Total gross wt. of engine and train, 494 tons. Engine built by Eastwick & Harrison at Phila.; 18 ft. long; wt. 26,640 lbs.; 12.7 by 16 inch cylinders; diameter of drivers, 40 inches. No cab, no sandbox, no pilot.

1860—A. Lincoln (later elected President) addresses huge audience in Union Station, Providence, R. I.

1888—Chilean Trans-Andine Ry. Co. is registered in London to build meter-gage railway from City of Los Andes in Chile to Chilean-Argentine boundary, there to connect with Argentine Trans-Andine Ry. (On Oct. 13, 1921, these 2 companies combined, forming the present Trans-Andine Ry.)

1892—Completion of Pecos River viaduct, on the S.P., in Texas, one of the world's highest bridges. It is 2,180 ft. long and 320 ft. above the water. Construction was begun Nov. 3, 1891.

February 21

1804—Richard Trevithick, a giant Cornishman, tries out the world's first steam locomotive on his railway in England.

1883—5 convicts escape from State Prison at Ossining, N. Y., by using N.Y.C.&H.R. switching engine No. 89. (Details in March, '32, issue.)

1892—Oliver C. Perry, "lone wolf" bandit, robs the same N.Y.C. express train he robbed five months before, and fights the most amazing duel known to railroad history by seizing a freight engine and racing forward and backward, pursued by armed trainman in another engine on adjoining track. (See article by E. Davis, Nov., '35.)

February 22

1849—Central R.R. of N. J. formed by consolidation of Somerville & Easton R.R. and the

Elizabethtown & Somerville R.R. (Now 690 miles.)

1851—First train runs from Cleveland to Columbus, O., on Cleveland, Columbus & Cincinnati R.R. (Later became Cleveland, Columbus & Indianapolis Ry., 471½ miles. Now Big 4; total mileage, 2,600.)

February 23

1843—House of Representatives at Washington passes bill, 89-83, appropriating $30,000 for F. B. Morse's telegraph experiments. . . . Original line of Boston & Maine R.R. opened between Wilmington and South Berwick, Me. (Now 2,093 miles.)

1861—President-Elect Abraham Lincoln arrives in Washington on B.&O. train for inauguration.

1905—President T. Roosevelt signs Public Act of Congress No. 98 authorizing I.C.C. to award medals for heroism. (So far only 39 railroad men have received this award. See article by C. F. Carter, May, '35, issue.)

February 24

1853—Missouri Legislature passes law: "The gage of track, or width between rails, of all railroads in this state shall be 5 feet and 3 inches." (Today the standard is 4ft. 8½ ins.)

1920—R.F.&P. Railroad acquires the Washington & Southern R.R. Was chartered Feb. 25, 1834.

1924—Coöperative shop plan put into effect on entire B.&O. System.

February 25

1832—Champlain & St. Lawrence Ry. inc. (Now part of C.N.R. Details in June, '32, issue.)

1864—First train enters Newport, R. I., on Old Colony R.R. (Chartered in 1844, 265 miles, now part of New Haven System.)

February 26

1868—Santa Fe takes armed possession of Raton Pass, blocking D.&R.G. which also wants to build through it. (Details in Aug., '32, issue.)

1870—First subway line in N. Y. City opened, 25c admission; proceeds given to charity. (See article by Jim Holden, Dec., '34, issue.)

February 27

1847—Chicago, Rock Is. & Pac. R.R. chartered as Rock Is. & La Salle R.R. (Name changed to C.&R.I., Feb. 7, 1851. Present title adopted Aug. 20, 1866. Opened to Rock Is., Ill., July 10, 1854; and to Council Bluffs, Ia., June 8, 1869. Present mileage, 7,576.)

1873—Congress passes vote of censure upon certain U.P. builders for Credit Mobilier stock scandal, originally exposed by N. Y. *Sun* newspaper.

February 28

1828—B.&O. Railroad chartered in Maryland. (Total mileage today, 6,295.)

1831—Second locomotive for Charleston & Hamburg R.R. (now Southern Ry.) arrives at Charleston, S. C., and is named the "West Point."

1848—Edward H. Harriman, railroad magnate, born at Hempstead, Long Island, N. Y.

1862—Pittsburgh, Fort Wayne & Chi. R.R. sold under foreclosure and reorganized as Ry., 506 miles. (Leased in 1869 to P.R.R. for 999 yrs.)

1868—Canada Southern Ry. inc. (Now part of the Michigan Central.)

1874—Passenger coach in westbound accommodation train of Great Western R.R. of Canada takes fire from falling of lamp. Bell cord not connected with locomotive, so train runs 2 miles before being stopped. Meanwhile, coach is destroyed by fire; 8 persons are killed, 13 injured.

February 29

1880—Hand-drilled Mont Cenis Tunnel in Switzerland is pierced. (Now 8.78 miles long, double-tracked; cost 60,000,000 francs. World's 5th longest railroad tunnel; see Jan., '35, "Lantern" dept.)

1896—Receivers appointed for B.&O.: John K. Cowen (11th president of the road) and Oscar G. Murray (later 13th president, Daniel Willard's predecessor). (B.&O. eventually emerged from receivership without a foreclosure.)

1916—Hawaii Consolidated Ry., Ltd., inc. as successor to Hilo R.R., sold at foreclosure; 106 miles of standard-gage in Hawaii and 9 locos.

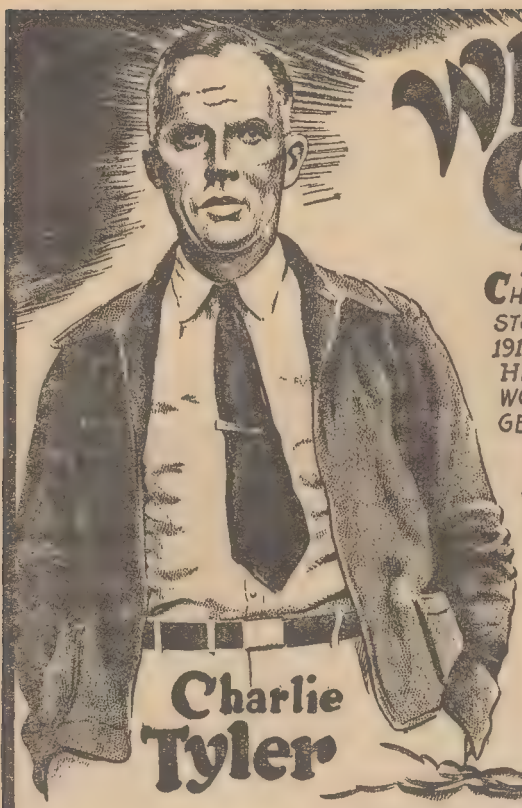
Ingenuity in Developing Passenger Traffic

BRITISH railways show ingenuity in developing passenger traffic. Stations on the Great Western issue travel-saving cards, each containing space for postage stamps to be affixed. When fully stamped, each card represents a face value of 10 shillings (about $2.50) and will be accepted at the issuing booking office either in full or part payment for a ticket. Any shortage in the fare is adjusted by cash payment. The booking clerk records the name of the person at the time the card is issued and the station's name is stamped on back of the card. The plan covers every type of ticket in use—commutation, monthly, tourist, day, half-day and party tickets for first and third classes.

Umbrellas are rented by two British railways, the Southern and the L.N.E.R., at some passenger stations. Daily rental is 4c. The L.N.E.R. requires a deposit of 84 cents for a man's umbrella or 60 cents for a woman's.

Who's Who in the Crew

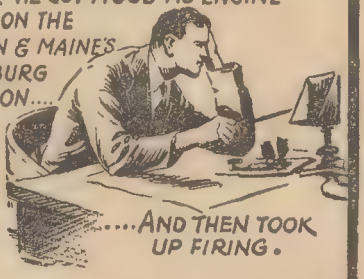
by Stookie Allen



Charlie Tyler

CHARLES W. TYLER, AUTHOR OF 70 STORIES IN THIS MAGAZINE SINCE OCT., 1913, WAS BORN ON A FARM IN NORTH HINSDALE, N.H., SEPT. 1, 1887. WHILE WORKING AS WESTERN UNION MESSENGER IN 1906 HE PICKED UP TELEGRAPHY AND BECAME AN OP.

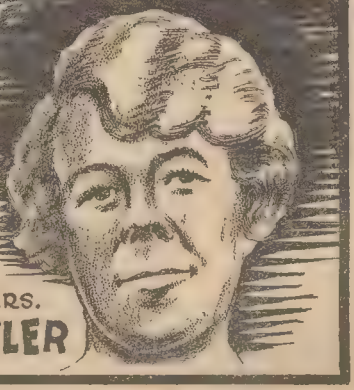
IN 1911 HE GOT A JOB AS ENGINE WIPER ON THE BOSTON & MAINE'S FITCHBURG DIVISION....



....AND THEN TOOK UP FIRING.

TYLER'S FAVORITE ENGINES WERE THE 2600 SERIES. ON APRIL 23, 1916, CHARLIE MARRIED ALICE McKENZIE. THAT VERY NIGHT HE WAS CALLED TO FIRE A SWITCHER. HIS BRIDE BROUGHT HIS LUNCH AT MIDNIGHT.

TYLER IS NOW OFF THE BOARD, BUT WITH HIS WIFE'S AID AND COOPERATION HE HAS WRITTEN 2 BOOKS, ALSO 304 SHORT STORIES AND NOVELETTES FOR 17 MAGAZINES, BEGINNING WITH "ON FIRST 303" IN THE OLD "RAILROAD MAN'S". MANY OF HIS PERSONAL EXPERIENCES ARE EMBODIED IN THESE STORIES. THE TYLERS LIVE AT 465 W. DORAN ST., GLENDALE, CALIF.



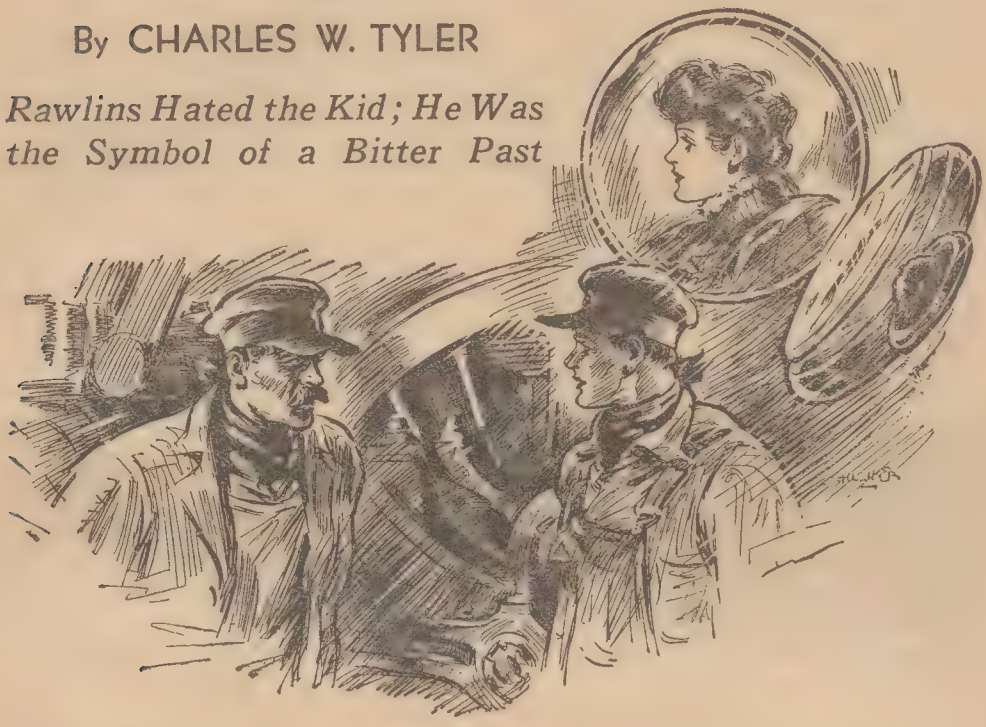
Mrs. Tyler

Next Month: Ralph A. Snyder, Boomer on 42 Roads

The Road to Yesterday

By CHARLES W. TYLER

Rawlins Hated the Kid; He Was the Symbol of a Bitter Past



SAID Mike Flynn, the master mechanic: "What the hell do you want to go firing for?" The boy shuffled awkwardly and cast dubious glances at the man behind the grimed desk.

"'Cause I like engines," he said, and hesitated. "Anyhow, my father was a railroad engineer, once."

"Where?"

"Right here in New England, on the River Division."

Flynn scowled. The youth didn't look as though he'd ever make a fireman. He was pale, slender and timid, with faded blue eyes. But since his father had been a hogger on the Central Valley—well, that was different. Might as well give him a chance.

So the "brass hat" said: "Yeah, you want to go firing. Well, it's a man-size job, let me tell you. How much do you weigh?"

"About a hundred forty-five."

"Never say *about*. Hundred fifty is the limit." Flynn hunted for a match, played with it a bit. At length he asked: "Hm, how heavy did you say you was, now?"

"A—hundred an'—*fifty*."

The gnarled master mechanic suppressed a grin. "Humph! Y'are, eh? I see. What's your name?"

"Cardee, sir. Christopher Cardee."

"Cardee. Cardee-e." Flynn took a much-chewed cigar from his mouth, scrutinized it, and stuck it back. "You ain't Park Cardee's boy?"

"Yes-s'r."

The official looked through his fly-specked window at a big passenger engine being groomed for a run. He looked beyond—far down the road to yesterday—and saw again shattered cars piled in mad confusion at Eagle Bridge, saw the torn roadbed, the twisted rails and two overturned locomotives, smothered in smoke and steam. Three men had died in the pile-up.

Park Cardee had been at the throttle of that first engine of the double-header. Blame for the disaster had fallen on his shoulders. His name had been scratched from the roster of the Central Valley's River Division.

Broken and disheartened, the engineer had taken his little family and moved away from Lynchburg. There had been a wife and a boy of seven.

Flynn glanced at the boy again. "What's your father doing now?"

"Running a hoisting engine on the coal docks in Boston."

"He is, eh?" The master mechanic shook his head. "Railroading is a tough game, my boy. You work years, and finally get an engine. Then something happens—and you're through. You're too old to start over again. About the only thing left is—well, running a donkey engine. You see how it works out."

The boy replied seriously: "I know. Father was in a wreck. He used to talk a lot about the engines, but he don't any more. Mother says he's never been the same."

"And still you want to try it?" growled Flynn, still chewing on the cigar.

"Yes-s'r. I'd like to."

The master mechanic's lips tightened. Here was something to think about. Perhaps the boy *would* make the grade.

"All right, Cardee, see the chief clerk outside there. He'll fix you up, tell you where to go for the tests."

AND so Chris Cardee was dumped into the crucible from which railroad men are made. He took his baptism of fire, there on the swaying apron between firebox and coal gates, as others had done before him.

He took three "student runs," and eventually found himself alone on the deck of a leaky old freight hog. The coal was bad, the shaker-bar was broken. It was shovel and hook—back and forth—coal, and more coal—hour after hour. And always the clock walked backward.

A full sixteen hours. And then, covered with coal dust, his eyes reddened, his muscles ablaze with torture, Chris let himself down. Ten crooked wooden pegs where his fingers should have been. His once-proud leather gauntlet gloves were fried and shrunken past all usefulness. How many times the grunting engine had died, how many times he had blown her hot, how many times he had been on the point of admitting defeat—Chris Cardee could not remember. But that trip would linger with him always.

The engineer patted him on the shoulder. "Kid, you're there!"

It was sweet music to his ears. Chris was happy. His father thought he was out on a construction job. The youth wanted to write home and break the news. However, he decided to wait a little. When he was really a fireman—a good fireman—then he'd go back some day and tell his dad all about it. He'd surprise the old man.

A few weeks later Chris was summoned by the telephone in his rooming house, and the crew dispatcher's voice cracked in his ear:

"Want you to relieve a fireman on Extra 2625. They're on the third iron. Hurry, Cardee! That job is 267's return. Baytown wants the engine. They're on short time."

The youngster thrilled at the thought of firing one of the newer-type, fast, freight engines. Excitedly he hurried to the street. It was a mile and a half to the East Yard, and the trolley that passed there was disappearing some distance away.

Chris glanced anxiously toward the depot, hoping to catch a light engine going to the "house." No. 6 was standing at the station, having just pulled in from the West. He ran toward the big Pacific, panting at the head of the long train of varnished cars, and climbed to the cab.

The engineer had finished oiling around and stood on the apron, flaring torch in hand. He was a powerfully-built man with a gray mustache and cold, gray eyes.

"Well, what do you want?" he demanded.

Cardee was winded. "They—they want me to fire 267's return. They're down in the yards. The street car has gone. Will you slow up at the tower a little so's I can get off? The other fireman quit on 'em."

"Oh, certainly," came from the gray mustache. "We stop at the roundhouse every night to let firemen off."

The boy stood in awe of the engineer, whose bleak eyes were now fixed on him searchingly. Suddenly a question shot out:

"What's your name, tallowpot?"

"Cardee, sir."

The hogger scowled. "Any relation to Park Cardee, who used to be—"

"He's my father," replied the boy. "Please, may I ride?"

After a few seconds of strained silence the older man mechanically dug into his overalls pocket, pulled out a gold watch, opened it, and glanced at the time. As he did so, Chris caught a fleeting glimpse of a lady's picture on the inside of the case. He waited impatiently for the hogger to make up his mind.

At length the answer came. The gray eyes were unfriendly, but the voice said: "There ain't anybody stopping you, is there?"

TOMMY DRAKE, the train fireman, pushed the spout clear and climbed down over the tender. The air went off, and No. 6 began to move. Drake eyed the youth in the gangway curiously.

"Where you going?" he asked, reaching for the hook.

"The East Yard. He"—Chris nodded toward the engineer—"said he'd let me off at the tower. I got a short call."

"That hoghead let you off?" scoffed Drake. "He wouldn't let his own mother off. That's Rawhide Rawlins."

"He said he would," Chris repeated.

"Yeah, I know. He's got a wonderful sense of humor."

"He won't have to pinch 'em down much," the youth ventured hopefully. "I could make it."

The grade dropped away slightly. No. 6 rolled on with increasing speed. The trucks rattled over yard switches and crashed onto the C.&N. cross-over. Soon a caboose flashed by, and the swiftly-moving passenger sped alongside a freight on the third iron with a reverberating roar.

Chris anxiously crossed the cab. He had a glimpse of an engine under the signal bracket and saw the dim forms

of men in her cab. On her headlight was the number X2526.

The boy looked at the granite form sagging over the armrest, sudden doubt assailing him. He let himself down to the last step. Rushing air snatched at his garments, whipping them fiercely about him. The whistle screamed. A green dot blinked from the mast above the tower.

Switch lights, blurred cars, silvered tracks, wispy smoke streamers, yard engines, the gloomy bulk of the coal shed—all swam before the watering eyes of young Cardee.

His heart was pounding against his ribs. Fear and desperation gripped him. He had told old Babb at the roundhouse that he'd be there sure. That freight was wating for him. Chris sucked in one long breath, crouched low—and jumped.

Lanterns danced. Figures ran from cleaning pit, sandhouse and switch shanty. Chris staggered to his feet and stood swaying uncertainly.

An engineman's torch revealed a bruised and battered face, torn by cinders and clinker fragments.

"My God, sonny!" a voice exclaimed, "what yuh tryin' to do—plow up the whole damn yard?"

"I guess I didn't jump right—or something," gasped the boy.

The answering voice was grim. "Well, yuh jumped right into the hospital. Them quacks up there will be diggin' cinders out uh you for a week."

"I got to relieve a fireman," Chris mumbled through mashed lips. The world reeled. He heard somebody say: "Call an ambulance." Then he fainted.

AS iron is wrought by beating, so in time Chris Cardee became toughened until he was as hard as nails. He built muscle and sinew, as he learned with painstaking care the art of firing a locomotive.

At length a traveling engineer brought word of him to the sooty office of the master mechanic.

"Say, Flynn, Park Cardee's boy has turned out to be a fireman. He can wind them old hogs up against the pin as slick as anything you ever saw. Good-looking kid. It's a shame he got marked like he did."

"Doing all right, is he? Hm! I sort of figured he had the stuff in him." Flynn squinted reflectively. "I heard something about his getting spilled at the East Yard one night."

Pat Regan, superintendent of the River Division, was there. The master mechanic reviewed briefly such facts as he knew concerning the fireman's jump from No. 6.

"Ted Rawlins was right, of course, if you want to look at it that way," Flynn commented. "But the kid was right, too."

Regan frowned. "I was trainmaster at the time of that wreck at Eagle Bridge, years ago. If I remember right, it was largely on the testimony of Rawlins that Cardee lost his job."

"Rawlins had it in for Cardee," said Flynn reminiscently. "There was bad blood between 'em for years. Nobody seems to know why. Funny that the boy should cross up with Rawlins the way he did."

"The powers that rule human destiny play some strange pranks," Regan mused, and that closed the subject for a long time.

THREE months after he marked up at Lynchburg, Chris went home for his first visit. He had already told the folks that he was now firing on the Central Valley. His

mother threw her arms around him. Then she noticed the little blue scars on his face.

"Oh, Chris!" she exclaimed. "What on earth happened?"

"Aw, nothing much! I just got a toss." He hastened to change the subject. "What time does dad get home? I've got lots to tell him."

Just then Park Cardee, blackened with coal grime after his day on the dock, came in. His shoulders were stooped, and he seemed old, but his face beamed when he saw the visitor.

"Chris!" He caught the boy to him.

"Hello, dad!"

"Well, sonny, I hear you put one over on me. So you went railroading?"

"Yes. On the River Division."

"It will be the making of you." There was a wistful light in the older man's eyes. "You like it?"

Chris responded with enthusiasm: "You bet I do! And, say, dad, a lot of engineers were asking for you. They want to be remembered. I've fired for some of the fellers that used to fire for you. Even old Flynn, the master maniac, wanted to know what you were doing, and everything. He asked me right off if I wa'n't your son."

Cardee turned his boy to the light and said: "You certainly marked yourself up in good shape," eyeing the scars with a frown. "What happened—you try to root up some roadbed?"

Chris explained briefly, adding: "Gee, I thought the railroad would stop running if I didn't get there to fire that job. Anyhow, I wanted a crack at that fast freight's return. I rode down to the East Yard on Six. The hoghead said he stopped there every night to let firemen off."

The boy laughed a little ruefully, and added: "I was so green I thought he meant it. Tommy Drake told me different, but I took a chance."

"It wouldn't hurt him to have slowed down," the ex-hogger rumbled. "You don't know who was running Six, do you?"

"A man by the name of Rawlins. Rawhide Rawlins. They say he's a holy terror."

Park Cardee swore. "I might have known it!" he said. "Did you hear that, Kate?"

"But, Park," the wife interposed, "he wouldn't guess who Chris was."

"He asked my name," said the boy.

"See!" cried the older man. "That explains it. Rawlins knew who he was, all right."

Along the road to yesterday a black shadow of the past was returning to torment them.

KATE CARDEE'S heart filled with foreboding. For years she had lived in the railroad atmosphere. Park had brought home with him so much pertaining to the work he loved. The thrill of fast runs, the dread of examinations, the swelling excitement of that first trip at the throttle . . . she had shared it all with him. . . .

Then came the wreck at Eagle Bridge . . . the tense investigation . . . and finally the utter despair of dismissal. Park had blamed it all on Ted Rawlins, and to a degree that seemed unreasonable.

Mrs. Cardee felt herself partly responsible. She and Ted had been sweethearts before she had met the man who was now her husband. Ted had never forgiven her for marrying Park Cardee—the scars on her son's face bore witness to that.

The woman recalled bygone days here in old New England, when Ted

was courting her. He was a fireman then; tall, straight and handsome. . . . She was young and pretty, the belle of Lynchburg, and wore her hair like "Gibson girls" of the period. . . . She had given Ted a little portrait of herself, which he had placed in the case of his watch, facing the dial. It was a standard railroad watch; Ted was probably running trains by it today.

"I guess he threw out my picture long ago," she said to herself. "And why shouldn't he?" The woman glanced at her husband and son, who were talking shop together. "So they call him *Rawhide* Rawlins now—poor Teddy, he sure took it hard!"

Woman-like, it did not occur to Mrs. Cardee to condemn the man she had once loved. But secretly she was worried about the future of her son on the Central Valley Railroad. And she said little when the ex-hogger briefly told the story of the feud that had started as a love triangle, had flared into an evil flame at the Eagle Bridge wreck investigation, and was now threatening the young fireman.

THE second winter that Chris was on the River Division he was transferred to Baytown. Here he would be in line for a lot of passenger work. It was a kind of promotion. The foreman at Lynchburg had given Flynn good reports concerning his ability.

One night he met Rawlins in the engineers' room. Chris had taken on a little weight, his face had filled out a bit, and his bearing was no longer that of a callow youth.

Rawlins did not recognize him, but eyed the scars curiously and wanted to know: "What happened to your face, fireman?"

Chris stood stiff and straight, staring at Rawlins. He made a fine picture in clean overalls and jumper, with a blue bandana tucked precisely about his neck and cap set at a jaunty angle.

"Howdy, Mr. Rawlins," he greeted, with a trace of derision. "You're the hoghead that always stops at the East Yard to let firemen off."

"What are you talking about?"

"My name is Cardee," the youngster snapped. "You were pulling Six a couple of years ago, and I got on the engine and asked you if you'd pinch 'em down so I could get off at the tower, because I had a short call. You rolled through the yards like a bat out of hell, but I got off. That's where these marks came from."

"Oh, yes, I remember," Rawlins flung back. "You should have known better than to think that a passenger train with a fast schedule would slow up at the roundhouse for a fireman."

"I do now," the boy said bitterly. "But I was green then; I'd only been on the road a few weeks." He paused, his lids narrowing a little. "I guess it didn't help any that night, telling you that Park Cardee was my father."

"What'd that have to do with it?"

"You ought to know."

"So that's your bellyache?" the rawhider's voice was hard-grained. "Want to bring your old man in, eh? Well, you follow in his footsteps, and see where you end up. You're one of them fellers that have to learn things the hard way."

"I did learn 'em the hard way, hoghead!" cried the boy. "That's how I got these scars. And you're not the sort of man to make things any easier than you can help."

"Why, you damn young cub!" snarled the engineer. "Don't you give me any of your sass, or I'm liable to take a poke at you."

"If you do," said Chris, "you'll get a poke right back! I ain't afraid."

He met the blasting gaze of Rawlins squarely. Watchers in the room held their breath, waiting for the explosion. But it did not come. The fireman turned on his heel and walked stiffly through the door, his face aflame.

WINTER spread its white mantle over New England. Late in December, the slanting flakes of a nor'easter came whispering in from the Atlantic. The light of afternoon died in a white smother. The Central Valley squared off for the fight of keeping the wheels rolling—maintaining schedules.

Ted Rawlins' side of No. 3 was going out tonight. The runner reached the roundhouse early. He wanted a little extra time to check over the 3651. Stalking into the crew dispatcher's office, he glanced at the board. Abruptly he pulled up and ripped out an oath.

"Where the hell is Cullen?" referring to his regular fireman.

"Marked up sick," the clerk explained, with a trace of a grin. "Got the grippe, I guess. Cardee was first out and we called him. What's wrong with that, you big lummox?"

"I won't have him."

The door opened. Rawlins swung on his heel as the booming voice of Mike Flynn exploded behind him.

"You won't have who?"

The engineer bawled angrily: "They're giving me that damn upstart of a Cardee for a fireman!"

"What's the matter with Cardee?" demanded the master mechanic, his eyes boring into the other.

"I don't want him; that's all."

"Oh, you don't? Ain't that too bad! Well, you'll take who you get tonight, Rawlins. We got troubles enough without listening to your grouch. Cardee is a good fireboy, and if he can't keep the 3651 hot nobody can. So get out of here."

When Rawlins hoisted himself up through the gangway, the fireman was wetting down the coal. Neither spoke. The engineer lighted his torch and began fussing with the lubricator. The hostler climbed down from taking water, and a little later the purple eye of the dwarf on the engine-house lead faded to green.

The 3651 rolled slowly out to the cross-over and began backing through the intricate maze of terminal division tracks toward the sprawled, skeleton train-shed structure.

SUPERINTENDENT REGAN walked up along the train and stood waiting with the car inspectors when the engine slid in out of the storm-whipped blackness. Rawlins eased the 3651 to the head pin on signal. The super climbed to the cab.

"Hello, Rawlins!" he grunted. "Say, we've got some bigwigs riding Three tonight, and it is important to make connections with the Montreal train at Greenville. The dispatcher will have everything in the clear for you, so far as it is humanly possible."

"We always make connections," the rawhider growled, "but we're going to need a horseshoe tonight, let me tell you."

"Yes, you'll be bucking snow."

"That ain't all. Cullen, my regular fireman, is sick. I've got one of them half-baked tallowpots off the spare board. This one is pretty flip when it comes to shooting off his mouth, but I doubt like hell if he can keep 'er hot."

"Who is it?" Regan squinted toward the figure on the left seatbox.

"Feller by the name of Cardee. Park Cardee's—"

"Yes, I know." Regan whistled softly, remembering his conversation with the master mechanic a long time before. Here was a little cross-section of life—the kind you read in story books. Cardee and Rawlins again. The boy carrying scars that, no doubt, he blamed the engineer for.

The engineman went on: "This 3651 we got is a pulling brute, but she's cranky as the devil when it comes to steaming. I tried to talk to Flynn out to the roundhouse, but that damn mule-head wouldn't listen."

Chris heard every word. Anger burned in him. It was the intention of Rawlins to discredit him. Anybody could see that. The engineer was purposely letting the water get low. Instead of starting with a full gage, which would give Chris a chance to build up his fire, he'd be working against the "gun" from the minute they got the highball.

He heard Regan say: "I'll wire Lynchburg to have a regular passenger fireman at the station in case this young fellow falls down on the job. Can't take chances going over Summit."

The superintendent crossed the cab and put his hand on the fireman's shoulder.

"Cardee," he instructed, "you'd better get a fire in 'er. We'll forgive you a little black smoke tonight. I'm going up to the dispatcher's office a minute; then I'll come back and ride to Lynchburg in the cab. I'm riding to Greenville on Three, anyway."

At one minute past six o'clock, the semaphore over Track 10 dropped. A lantern flashed, and the drivers of the huge passenger engine settled slowly to their task. The first labored coughs from the stack quickened, and the train rolled into the night.

Out across the drawbridge in somber serpentine parade glided the cars of No. 3, past the interlocking tower, under the skeleton of the gantry and onto the sweeping curve of the River Division tracks.

RAWLINS was hunched over the arm-rest, squinting past the glass weather-wing, searching out signals in the hoary blanket. On the deck Chris stood full in the orange blast from the open fire doors, driving his long iron hook through the burning coals.

On the left-hand seatbox sat Regan. His eye alternated between the white face of the steam gage, high on the boiler butt, and the fireman on the deck. The scoop hit the door ring with a rhythmic precision that was beautiful to watch.

Back and forth, footplate to the roaring inferno of the firebox. Smoothly, evenly, green coal covered the molten white spots; far down in front of the flue-sheet; now to right; now to left. At intervals the full-laden shovel dropped its load into the back corners where cold air was sucking through.

The rails lifted to the mounting slope of Waynesboro hill, Rawlins found a kind of savage joy in notching the Johnson bar down the quadrant. He widened the throttle to its full range. The 3651 responded with a deepening roar of her exhaust.

Gradually the drag of the grade increased. And yet the quivering needle hung to the pin. Came a low mutter from the dome that said the pop was about to open. It let go with a bang.

The rawhider turned to stare down at his fireman. Never once since they had left Baytown had Rawlins given the youth respite from the incessant flow of cold water through the injector. He was hitting the 3651 for every last ounce of energy in her steel heart.

Here was a fireman who could wind her up against the "gun," hard steamer that the engine was.

Regan took a cigar from his pocket. The flame of the match, as he lighted it, showed a grim smile of satisfaction on his face. They were beating out the storm with a white feather and a red stack.

A red board stopped No. 3 east of the middle at Putnam Junction. Ten minutes were lost, while a freight fought its way in through snow-clogged switches. Again at the East Yard, there was a twelve-minute delay.

Pat Regan got off at the Lynchburg depot. "Whatever else we may need to wheel this train into Greenville," he told Rawlins before he left, "it isn't a fireman."

"Damned if we do," Rawlins agreed with grudging admiration.

The conductor came from the telegraph office with yellow train-order tissues. He walked to the spot where the engineer was poking in between the drivers with his long-neck oiler.

"They're going to give us a pusher to Summit," he told Rawlins. "And here's a superseding order. We're to pass Number Seventy-Nine at Eagle Bridge instead of Grange. They're running thirty minutes late."

Rawlins stuffed the flimsies into a pocket of his jumper and finished oiling around. The fireman pushed the water spout clear and swung down to the deck, as the conductor called: "All aboard!"

No. 3 toiled up the long grade to Summit, fighting all the way. The staccato bark of the exhaust of the 3651 was echoed by the steady chant of the pusher behind. Drawbars creaked and strained, flanges shrilled against the frosty rail, the side-rods flung out their monotonous clank.

AT Summit the pusher dropped away from the snowy vestibule of the last car, and No. 3 tipped down the long western slopes with a quickening beat of the exhaust.

Ted Rawlins stood up and held his watch where it caught the glow of a gage light. His jaw set grimly. There was a lady's picture in that watch, but the old engineer wasn't thinking of her now.

His brain moved in the channels of habit. He went over the normal order of things relative to train movement on the westbound iron ahead of him—and *forgot* the flimsy scrap of train-order tissue, that superseding order in his jumper pocket.

Plainly enough the Rules and Regulations of the Central Valley set forth the fact that "Train orders *must* be shown by enginemen to firemen. Firemen must read and return them. . . ." This Rawlins had not done.

Time and the driving storm were both arrayed against No. 3!

"Reduce speed at Thomaston," the engineman told himself. "Stop at Alton. Stop at Grand. Slow, of course, for Walden Junction. Slow through the High Bridge yards."

He decided to shave those slow-downs mighty fine. It was practically down grade all the way. If he didn't show Three's headlight to the towerman at Greenville on time, he'd come close to it. Close enough, anyway, to make that Montreal connection.

Regan was back there in the train. The super wanted speed, demanded it. Rawhide Rawlins grinned crookedly. Well, he'd give it to him.

Signal masts whizzed past like fleeting ghosts, their smoldering eyes dimmed by the storm. The engineman kept his window open, defiant of the snarl and bite of wind and snow, al-

ways watching for the first faint glimmer of the lights of automatic blocks.

AT Thomaston, No. 3 had made up five minutes. The heavy train roared down on the dingy little depot. An operator peered from the white-draped panes as the drumming cavalcade of wheels and steel shapes, studded with dim lights, swept past in a hurricane of flying snow.

"Damn!" exclaimed the man at the key. "Number Three is traveling!" He reported the train by, and the time.

The dispatcher made a notation on the train sheet, a faint frown clouding his face. He said to the man across the table from him:

"Seventy-Nine was forty minutes late at Thomaston. They're never going to get into the clear at Eagle Bridge without stabbing Three. Rawlins is about on their yellow block now."

Whatever time Rawhide Rawlins made up in the next ten miles would have to be wrested from the curves and grades of Blackwall hill—as treacherous a piece of track as there was on the River Division!

CHRIS put in a heavy fire, closed the air valve of the fire doors and cracked them just a little. He then mounted the seatbox on the left.

No. 3 crashed through rocky cuts, whipped down the lane of close-bordering wooded hillsides and rocketed along short straight-aways, with the white-flecked water of the Shawneen pacing the rail every foot of the way.

The smoke laid its whipping banner flat over the silver frosting of car roofs, while a trace of fire-glow shot it with flickering amber. A thin feather of white spun back from the dome.

It was next to impossible to see beyond the pilot. Chris glanced across at Rawlins. The engineer was standing up, wiping the glass weather-wing with a wad of waste.

The quick, low mutter of the exhaust told that the throttle had been cut, but the 3651 was working steam, nevertheless. The train smashed at a curve and came reeling off the tangent with a staggering lurch. Chris opened his window and leaned out, trying to pick up a signal across the bend, but the hoary blasts made it next to impossible to see at all.

Two emerald pendants hung for an instant straight above the roaring engine, then were snatched away.

The engineman's lips were tight, his eyes held a glint of grim satisfaction. He wondered how Mr. Regan, back in the train, liked his ride. And yet a vague something stirred restlessly in the back of Rawlins' mind.

A short steel span strummed under the rolling drivers. The Shawneen was on the right now, whispering unseen in its rocky defile.

No. 3, following the river, tipped onto a long right-hand curve. The fireman crossed the cab, stooping under the storm curtain, to stand in the gangway. He leaned out a bit, lids squinted against the assault of stabbing flakes, to watch for the next semaphore mast, which would be the distant signal east of Eagle Bridge.

It came from nowhere, and was gone with the speed of a heart-beat. Chris Cardee stared up at it. The top light was green. *The lower light was out!*

Rawlins closed the throttle, but made no move toward a service reduction, to check a little their speed with brakes. Their heavy train raced on down the grade. Chris moved across the apron and called a warning at the stony figure on the right.

"That yellow arm didn't show a light."

"Well, what of it? We're on a double green!" Rawlins uttered a harsh laugh. "Getting scared, Cardee?"

"No, I ain't scared!" cried the fireman. "But the book says if a light is out, you got to regard it as being in its most restrictive position. Maybe that board was yellow."

"So are you!" sneered the rawhider. "And let me tell you something out of the book: 'Firemen while on duty must follow instructions of enginemen.' All right. You 'tend to your firing, and I'll look out for the rest of it."

THE words were hardly out of the hogger's mouth when a soft, crimson light smoked through the stormy blackness ahead. It was a red fusee!

Rawlins cursed. He snatched at the brass handle of the E-T equipment, and swung it full to the right. He flicked the sander valves open almost in the same motion, a cold stricture tightening about his heart.

Regan was back there in the train. He would see the reflection of the burning fusee as the cars sped over it. If there was a tail-end down here ahead of them, it would mean that they were on a yellow block. In that case, the superintendent would have plenty to say, which would not be pleasant to listen to.

Emergency air jammed the brakes against the wheels with a smashing impact that was almost like a collision. Wheels locked, trucks lurched and swayed, draft rigging buckled with iron-jawed fury. Fire danced. The rails smoked and screamed.

Some six hundred tons of iron and steel, streaking down Blackwall hill at fifty miles an hour, reared onto its heels and tried to stop. The gage was clean, every ounce of air had been spent, and yet No. 3 surged forward with heart-sickening rapidity!

The pull of the grade and a frosted rail were dropping the train down around the long curve east of the fateful Eagle Bridge into a forbidden zone of red.

Not one grain of sand spilled from those pipe ends under the 3651's drivers!

Rawhide Rawlins lived a nightmare in a matter of seconds. He hauled desperately at the reverse lever, a tight-lipped oath breathed forth with the fervency of a prayer. He remembered now, for the first time, that train-order tissue, wadded deep into his jumper pocket: *No. 3 pass 79 at Eagle Bridge instead of Grange!*

A cold, accusing finger pointed at the engineman. He had not shown the yellow flimsy to the fireman. Ted Rawlins endured now the hell that had seared the soul of Park Cardee one other night, here on Blackwall hill.

The first backward slam of the 3651, as the engineer whipped her into the big hole, spilled Chris Cardee against the shield over the firedoors. He fought erect, legs straddled against that surging thrust. His mind worked swiftly. He knew the feel of wheels fighting for traction. Instinct shaped an instant course of action.

Chris reached for the first thing that came to his hand. It was the shaker bar. There was no time for anything but one desperate attempt to put sand on the rail. He lunged past Rawlins and over the quadrant and opened the door in the front of the cab.

Vaguely he heard Rawlins yell something at him. His feet found the snowy surface of the swaying running-board shelf slippery and treacherous.

His fingers snatched at the hand-rail and nearly missed it as the engine gave a lurch.

A signal mast drifted by, wearing ruby above and amber below. Down the track, No. 79's flagman, scared by the oncoming headlight, which dared cross the deadline of that red block, uncapped a fusee and swung it desperately as he ran back.

Chris clawed his way forward toward the sandbox, just behind the stack. He steadied himself with his left hand, while he rained frantic blows at the pipes that curved down over the jacket of the big Pacific with the steel bar.

CLOTTED sand broke free at last, and yellowish streams spurted onto the rail Came the instant grinding hiss of wheels fighting for traction on the slippery track.

The tail-lights of No. 79 winked through the blackness. Dim yellow panes pushed their checkered squares into view. A snowy boiler-front, weaving threateningly, thrust its bulk closer. The beam of the headlight silvered the rear of the local's last car.

There was a final chattering crash of trucks and brake and rigging, and No. 3 came to a stop a few feet short of the train ahead.

A panting flagman in the right-of-way ditch bawled curses up at Rawlins. Chris Cardee climbed down over the pilot. Pat Regan came stumbling ahead on the heels of the train conductor. The engineman swung from the gangway and dropped to the ground.

The superintendent was foaming. "What in hell do you mean, Rawlins—wheeling through a yellow block like that? You knew that Seventy-Nine was going to clear us here." Regan swore long and loud. "Why in the name of God wasn't you on the lookout for them?"

"Yeah, I know," came from the gray mustache of the engineman, "if we make time it's all right. If we get in a jam, it's a bunch of brownies an' dance on the carpet. That's railroading."

The light from the grates touched the little group standing under the cab. Regan saw the blood on the fireman's hands.

"What happened to you?"

Rawlins spoke up. There was admiration in his voice: "Cardee crashed out through the front cab window and knocked the sand loose, right when it looked like we was going to kick that tail-end to glory."

"It don't amount to anything," protested the boy. "It was just a scratch or two. I'm all right."

The runner fished the gold watch out of his pocket, glanced at it automatically. His glance fell on the picture Kate had given him long ago. He started, looked at Chris. Strange, he hadn't seemed to notice before—the resemblance to the girl he had loved so long ago.

The gray eyes were shining now. Maybe it was a reflected glow from the firebox.

At any rate, Ted Rawlins pushed forward, hand outstretched.

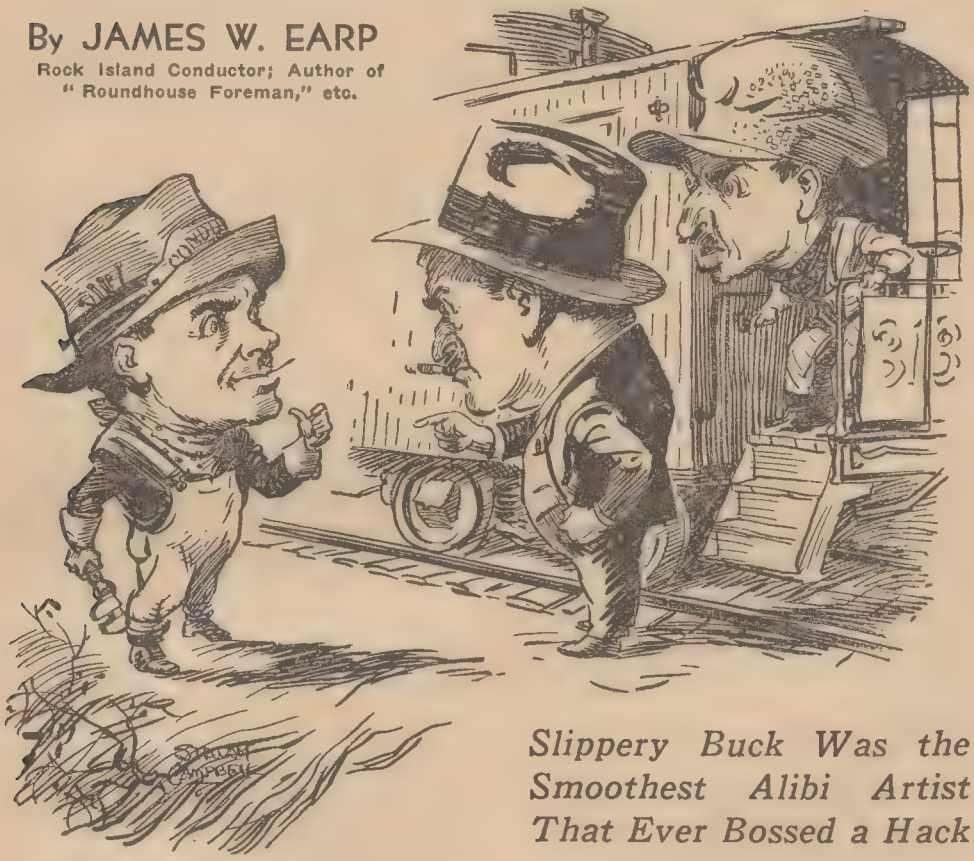
"That was mighty fine of you, Cardee!" he said heartily. "I'll never forget it."

"Thanks, Rawlins."

A bloody palm was lifted to the clasp of gnarled fingers. For a moment they stood there, two overall-clad figures beside the drivers of the panting 3651—meeting face to face on the road to yesterday.

Souvenirs for the Super

By JAMES W. EARP
Rock Island Conductor; Author of "Roundhouse Foreman," etc.



Slippery Buck Was the Smoothest Alibi Artist That Ever Bossed a Hack

EXPERIENCE teaches some folks nothing. Take Superintendent Hackett, for example. If he hadn't tried to get even with my conductor, "Slippery Buck" Anderson, he might have been a big official by now. Getting even with Buck was like tipping over a hive of bees and thinking you could get away without being stung. Buck didn't have the reputation of being the smoothest conductor that ever bossed a hack or slipped a fast one over on the bosses for nothing.

Me and Buck had been on a month's vacation—said vacation being paid for by the T. K. & P. because Hackett pulled a bonehead. Rumor had it that Bulger Bascom, our general manager, sure jumped on Hackett over that vacation. But it don't make the super change his ways. If anything, that brass collar is more set than ever on getting Buck's job and showing him up.

Being Buck's brakeman, I know I'm included. Me, I'm Boomer Jones. At least I used to be. I'm not booming any more now. Before we're back on the job a week, so many things happen that I make no bones about my suspicions to Buck.

"Any time that glorified pencil pusher gets anything on me, I'll apply for admission to the home for the feeble-minded," Buck grins. "And if he gets too smart, we'll just stick him for another vacation on full pay."

"I'd rather be left alone," I sighs. "My nerves ain't at all what they used to be. Somehow, I have a hunch we're due for trouble."

My hunch is right. We're bouncing along behind eighty cars of revenue freight the day it begins. An air hose blows up. I know it's an air hose by the way the gage in the caboose performs. To make matters worse we're only a few minutes ahead of No. 12, the fast express.

"Throw out your pedal extremities, Jonesy," Buck commands me. "Twelve is due out of Folland. If we get the hack mussed up and kissed in the rear I'll never forgive you."

So I grab a red flag and some torpedoes and do a foot race back down the track to stop No. 12, while Buck takes a monkey wrench and a new air hose and starts over to repair the damage. He's still over there when the passenger train shows up. I flag them and mount the engine to tell the hoghead my troubles.

"Air hose?" sneers the engineer. "Funny how you birds always have an alibi. I don't suppose any of you ever get on short time ahead of a passenger train." He opens the throttle and then gives me a funny look. "Say, don't you brake for Slippery Buck Anderson?"

"Sure," I reply. "Why?"

"I thought that alibi sounded familiar," he growls. "Don't suppose Buck knows that Hackett and his private car are on the rear today. It would be just about like the super to want to see that busted air hose."

"Well, we'll have one to show him," I point out.

"Yeah," grunts the hogger. "I wouldn't be surprised at that, either."

BY this time the express pulls up behind the caboose. I've hardly hit the ground when our engineer sounds his whistle calling me in. Just as I reach the caboose and give the highball who comes up behind me but Super Hackett and Fanning, the trainmaster. They mount the crummy as we start.

"What time did you stop here?" Fanning asks.

"I don't know," I tell him truthfully. "We left Folland at 9.42. I remember telling the conductor the time, just before he said to highball."

"Why did you stop?" Hackett asks.

"I think it was an air hose blew up," I says. "The conductor went over to fix it."

The trainmaster is jotting something down in his notebook when Buck swings on. All Buck has in his hand is the monkey wrench. This doesn't surprise me. Lots of times we leave things on a car and get them later. But Fanning and Hackett give each other a knowing smile.

"Sorry about the delay to the express," Buck begins at sight of the brass collars. (In case you don't know it, a "brass collar" is an official.) "Air hose blew off its connection," Buck goes on. "Thought I'd never get the connection loosened. It had rusted in the train line pipe."

"And where is the air hose?" from Hackett.

Buck looks surprised. "Somewhere along the right-of-way, I suppose. I told you it blew off the connection."

"How do you expect to get a new hose in place of the damaged one?" Hackett goes on. "The rules insist

that damaged hoses must be turned in before a new one can be issued. Who do you think is going to turn in the old hose for you?"

"I suppose the section men will when they find it," Buck half snaps. "That is, if they ever find it. If they don't, we'll get a new hose or do without it. Rules can't run a railroad without some common sense from the men. My one thought was to get away from there quickly, with the least possible delay to the express."

"The section men have enough of their own work to do without helping trainmen," Hackett says emphatically. "It's up to you alone to find and turn in that hose. I shall expect you to comply with the rules, Anderson. And until you turn in the air hose for my personal inspection, your delay report will not be considered acceptable. Do I make myself clear?"

"Quite," Buck nods grim like. "I suppose you want me to deliver it to you at your office?"

"It might save you some loss of time," Hackett says meaningly.

Buck just bows and goes in to wash his hands. I mount the cupola while Hackett and Fanning find themselves seats. Both are laughing.

"Let them laugh," Buck says. "Many a man has laughed at the wrong time and lost himself a good job. Other men have been laughed out of good jobs, too, Jonesy."

"Just the same I'd collect transportation from them," I insist. "They'd be mean enough to try to fire you for carrying passengers without fares."

Buck decides my idea is right sensible, and collects from them. I may be wrong, but they sure act disappointed because Buck remembers to ask them to sign pass slips and show their passes. They get off at Marland.

WE make the round trip without any more trouble. Back in Pineville me and Buck go down to Folland to look for the lost air hose. We find it after half a day's work. When we meet the section foreman he admits he has orders from the super not to pick it up or touch it.

True to his promise, Buck delivers it in person to Superintendent Hackett. One look and Hackett shoves it aside.

"Your delay report is acceptable, Anderson. To guard against any future misunderstandings or doubts, I am issuing a new general order which I feel sure will interest you."

"Yeah?" Buck says.

"Yes," Hackett nods. "From now on, whenever damage occurs to any part of your train, you must deliver the damaged parts to me. The day of shoddy workmanship and passing the buck by you trainmen is a thing of the past as long as *I* am in charge on this division. Explanations will be accepted only when accompanied by the evidence."

I blow up when Buck tells me what happened. "The old slave-driver!" I storm. "That's plain rawhiding. He knows it. What does he think we are —pack horses? Suppose a drawbar is pulled out?"

"Then we will deliver the drawbar," Buck smiles with a peculiar glint in his eye.

He treats the whole thing as a big joke. Not so with the other conductors. Hardly has the order been posted, but there is one big howl from them. Even that is nothing compared to what the brakemen put up. They call a meeting of protest. They want to pass a resolution not to load any drawbars, brake beams or heavy parts.

"Better live up to the rules," their local chairman advises. "Superin-

tendent Hackett has the authority to issue new rules; and the conductors have the power to make brakemen live up to them. It's a raw deal but we can do nothing about it now."

"Soda Pop" Johnson is the first conductor to get hit with the new rule. In his case it's a drawbar. Soda Pop has to hire a truck to get the evidence to the super's office. It takes two men to handle the drawbar. Since Soda Pop's idea of a heaven is a place where you don't have to spend any money, you can imagine how he feels.

"The drawbar has a flaw in it," Soda Pop tells Hackett. "I wasn't to blame. Neither was the engineer. Who's going to pay these two men?"

"You are," the super says with what amounts to a chuckle for him. "That is part of your job, Johnson. Your evidence is acceptable. Now you'd better have the drawbar delivered to the rip track foreman."

Soda Pop almost explodes at this, but there's nothing to do but obey. All told, the job costs him two dollars. Nobody laughs at Soda Pop in these days because two dollars don't grow on trees for railroad men, and the next time might be anybody's.

"It's not fair," Soda Pop protests to anybody willing to listen to him. "Why should I pay for a hoghead's mistakes or blunders?"

A WEEK later enough other conductors agree with him to call a meeting of hack bossers. They decide that the engineers ought to share half the expenses. That proposition don't find any favor with the throttle pullers. They had nothing to do with the order being put out, and they certainly aren't going to pay for anything they don't have to. That's when some of the conductors come to Buck for advice.

"Say, Slippery, what would you suggest we do about it?" they inquire.

"Live up to it to the letter," Buck says. "The only way to break up a bad rule is to live up to it. I intend to do just that."

Personally, I'm surprised at Buck. He ain't called "Slippery" for nothing. The night we break a knuckle, Buck carries the broken knuckle to Hackett as meek as any of the lambs. The super don't happen to be in at the time. Neither is Trainmaster Fanning.

Buck leaves the knuckle on the super's desk and goes about his business. But his performance gives all the rails something to talk about. They decide that Buck has lost his cunning.

Funny, isn't it, how little it takes to make bad feelings between folks? In no time at all the conductors and brakemen ain't even speaking to the hogheads and fireboys, unless on business, because they balk at helping foot the bills. That is, all except our engineer, Lazy Lon Bolton, and his fireman. Buck has them well trained.

Of course, things ain't bad enough but what they can be worse. And they do when Superintendent Hackett decides the men need to be tested on the rules to see whether they're performing one hundred per cent.

It gets to be nothing unusual to be making thirty-five or forty miles an hour and have an automatic block turn red right in your face. You can imagine what the engineer does to the brake valve on the engine.

Boy, it's like flirting with death to be a rear brakeman! Just the same, however, Hackett expects you to hit the ground as soon as your train stops, no matter how badly crippled you are. If you don't the chances are you haven't a job when you come into Pineville.

Hackett and Fanning are having the

best time of their official lives. They put signal lights out on stormy nights, and the brakemen have to climb the poles to light them—all such underhanded stunts as that! No wonder some of the engineers have nervous breakdowns.

Finally the men get together and send delegates to wait on Bulger Bascom, the general manager. Bulger listens, but won't do anything.

"Superintendent Hackett is paid to run the Siwash Division," Bulger informs the delegates. "His idea of a fair test is final as long as it does not violate any rules. However, I will put back to work the men he has fired."

Bulger does. A square old bird—Bulger. But Hackett gets even more crooked with his tests after that. The men are becoming so mad about them that the general order is more or less forgotten in the meantime.

Our jobs get to be nerve strains of the worst kind. You never knew when or who is to be the next fall guy to lose his job.

ME and Buck are lucky not to get caught in any of the tests. Of course, I'm hitting the ball as nearly one hundred per cent as I can.

Good thing, too, for one night Hackett gives us one of his phony tests when we're on short time ahead of "The Golden Arrow" limited. He must have known we would delay The Golden Arrow. Maybe he wanted us to. I don't know. All I know is we whip around the curve out of Whiting like a race horse coming in the home stretch. Suddenly I see a reddish blaze alongside our train. Right then I know business is no good.

"Red fusee!" I yell down to Buck at his desk. "Engine is by it."

"What the hell!" Buck swears as he mounts the cupola quick as a wink. "You suppose Lon never saw it?"

"Probably never did," I answer. "Lazy Lon don't run no red fusees."

"Neither do we," Buck says angrily. "Tie yourself on good, Jonesy. Here is where we test out the T. K. & P.'s equipment."

We do. Buck grabs the emergency air valve and throws it wide open. The caboose gets stopped almost even with the blazing red fusee, and I'm on the ground with the regulation flagging equipment ten seconds later. Without waiting for any information, I go back to flag.

I'm a good half mile back when The Golden Arrow appears. They stop to pick me up, then drag down to where the caboose is standing. Way up ahead I can see two lanterns moving. One belongs to Buck, the other to my partner, "Buttons" Brown. Evidently we got grief. I mosey over to find out what I can do.

The more I see of the layout on my way over to where Buck and Buttons is working, the more tired I get.

Yeah, we stopped all right, but seven broken knuckles and three drawbars pulled out is only part of the resulting damage. One of the drawbars is dropped under the train in such a way that every car passing over it is stripped of its brake rigging. The last car to be stripped jumped the track. On seeing me Buck laughs.

"Nice looking mess, eh, Jonesy? Hackett should be proud of this."

"So proud that he'll probably fire us," I gloom. "It'll take all night to clean things up, and The Golden Arrow is just behind us. I flagged them."

"We'll let them by as soon as we can get these bad orders set out," Buck informs me. "I've already taken one car over to Creekville. About ready

for another trip. You slip back to the hack and get the emergency knuckle there. That'll save us setting out another car."

It's while they're on the second trip to Creekville that Fanning shows up. Take it from me, he's one worried trainmaster. Since it is five miles to the town you can guess how long it takes to make the trips.

Fanning hops Buck as soon as he returns. I have a hunch he's taking orders from Superintendent Hackett, who is somewhere near.

"Don't you realize you are delaying The Golden Arrow?" the trainmaster asks Buck. "What do you suppose the management will say about this?"

"What they say is no worry of mine," Buck says. "I'm doing my part."

"The evidence points to the fact you did not," Fanning retorts. "Mr. Hackett will certainly demand an investigation over this affair, Anderson."

"If he doesn't, I will," Buck says meaningly. "Tell him so for me."

Fanning shuts up at this.

It's all of two hours later before we limp over to Creekville and let The Golden Arrow by. I stay back to flag because Buck plans to load the drawbars, broken knuckles and brake rigging which fairly pave the right-of-way.

"Never mind this damaged equipment," the trainmaster orders Buck. "Section men can load it on the local tomorrow."

"Mr. Hackett gave me to distinctly understand that section men were not to do our work," Buck replies politely. "Since that is what he wants, that is what he gets."

"But you have important freight and short time stock," Fanning almost cries. "If we fail to make the market with this stock we'll have big damage claims on our hands. In view of these facts I command you to get your train moving promptly and leave this mess for the section men to clean up."

"Sorry," Buck says. "But there is nothing in the rules that says a trainmaster can command a conductor to ignore a general order. All I can do is follow only the instructions already put out."

And off Buck highballs, leaving Fanning perfectly frantic. I see the infuriated trainmaster board The Golden Arrow. Superintendent Hackett is there. The flagman afterwards tells me the super just about wore the carpets off the Pullman, with his pacing back and forth. Sure, he is the one that pulled the red fusee trick.

As they pass me by, he is waving his hands and shaking his fist at Fanning. Evidently the trainmaster has told him what Buck said.

I GO on about my flagging business. A freight train comes along and picks me up before Buck comes back with the engine and caboose. Buck, Buttons and the fireboy are loading the junk when we come dragging down to them. Fanning and Hackett are both there. The super is raging at Buck about the delay.

"This is the most disgraceful performance I have ever witnessed," Hackett is spluttering. "And I want you to know, Anderson, that I am checking it all up to you."

"Not to me," Buck denies. "I am only obeying orders."

"And I have told you that I've annulled that order!" Hackett bellows. "For the last time, will you get your train moving?"

"When I have finished my work," Buck yawns, tired like. "The rules

plainly state that the only way a general order can be annulled is by another general order. And all general orders have to be posted on bulletin boards before they are officially in effect. Sorry, but those are the rules. I had nothing to do with them."

That settles it for Hackett. He and Fanning go over and sit down on some old ties. Both look like they're disgusted with railroading and railroaders in general. Pretty soon the trainmaster comes over to Buck.

"Take your caboose and go to Creekville," Fanning says. "Let this freight pass you; then return here to finish your work."

If he thinks Buck will refuse, he's mistaken. Buck knows when to refuse and when not to. They highball off, with Fanning and Hackett going with them. I stay back to flag as usual. Buck and Buttons are chuckling when they come back.

"The freight is picking up our stock and hotshot freight," Buck tells me. "We're taking the caboose and returning to Pineville just as soon as we finish this job."

"Suits me," I says. "I'm tired."

I'm more tired than that before we finish loading all that junk. The caboose is loaded plumb full of drawbars, knuckles and brake rigging and what have you.

I am wondering what the end is going to be. Hackett is not the kind to forget, let alone forgive. I says as much to Buttons.

"If they can outsmart Buck, dubs like me and you had better get a job selling pencils," Buttons observes very confidently.

Personally, I agree with him. Maybe it's because I know I'm in the clear that I sleep so good that morning. I wake up when Buck comes by for me. Outside my gate is a big draywagon and two husky draymen.

"Thought you might want to see the fun," Buck grins. "We're delivering the evidence to Mr. Hackett. Remember the general order he issued a little while ago?"

"Huh?" I gasp. "Buck, you can't do that. That's going too far. He'll fire you for sure."

"No man ever got fired for obeying orders," Buck smiles. "File that for use when you get to running a train. I was afraid our beloved super might cancel that general order before I could do it. So far he hasn't. That makes everything fine!"

ONLY the chief clerk is in the office when we get there. At first he takes it as a matter of business. But by the time the room begins to fill up, he gets kind of annoyed.

Then the other clerks get wise to what is going on and turn out to see the fun. Even the chief dispatcher and the dispatchers join them.

"Alibis, I suppose?" the chief dispatcher asks Buck. "Pretty heavy alibis, Buck. Ought to carry a lot of weight."

"I hope so," Buck replies.

This starts the crowd to snickering. Funny how catching laughter is. From then on the snickers turned to howls that'd make anyone think we was putting on a vaudeville show. Every time the draymen show up with a fresh load of knuckles or drawbars or brake riggings, it's a signal for more roars and wisecracks.

"Souvenirs for the super," one of the crowd says. "I'll bet Bulger Bascom will want one of those drawbars for a watch charm."

"Two to one he wants Slippery's scalp," puts in another.

"Give you odds he don't get it," another calls.

By this time the super's office looks like a junk dealer's back yard. Still the draymen bring up the stuff. The entire office force is in the corridor fairly raising the roof with their howls, when who comes waddling up the steps but General Manager Bascom. Behind him is Hackett. Bringing up the rear are the draymen with the last load.

Do the clerks fade out of the picture like a bunch of scared rabbits? They do not. The show is too good to leave by this time. Bulger takes one look at the crowd, another at Hackett's office. Then his fat cigar starts sliding back and forth in his mouth like it always does before he explodes. Maybe he wants to laugh. I don't know. The draymen push by him to dump their load, and then turn to Buck.

"That's all, Mr. Anderson," they say. "Anything else?"

"No, boys," Buck replies. "You know where to send the bill."

Bulger's cigar stops dead still. Buck is standing like an usher at a funeral. For the first time the G. M. notices Buck.

Before anybody can say a word Hackett pushes forward, his face purple with anger. He knows that Buck has put over another fast one on him. To this day I don't know how he could have been so dumb as to let himself in for the joke. He should have known Buck would do just that.

"What do you mean by bringing this junk here, Anderson?" he says in a hoarse voice. "I told you last night that general order was being annulled."

"The general order is still posted on the bulletin boards," Buck explains gently but firmly.

Giggles from the crowd. They're enjoying seeing Hackett get a dose of his own medicine. He's always preaching rules to them as well as to everybody else. Those giggles make Hackett lose what little sense he has. He whirls on Buck like a madman.

"Remove this stuff immediately, Anderson. Deliver it to the rip track foreman. I'll discuss this matter with you at the investigation."

"Sorry, Mr. Hackett," Buck says with a shake of his head. "Your order calls for delivery only. I have done that. If you want the stuff removed you will have to arrange for that. I have done my duty."

"So!" Hackett shrieks. "You refuse? You hear that, Mr. Bascom?"

He turns to the general manager, who is still chewing his fat cigar and saying nothing. The crowd is quiet as mice now. Some of them are disappearing. Bulger shifts his fat cigar, and nods to the super.

"Call the rip track foreman," he tells Hackett. "Have him send up a gang to remove the débris. This joke has gone far enough."

He waves his hand at what is left of the audience. "The show is over. Get back to your work. The management is paying you for work and not for fooling around."

Hackett swallows hard but he don't argue, just sort of fades out of the picture. So do the clerks.

HARDLY has the super left when Bulger faces Buck. He growls deep in his throat, but the growl don't fool me, let alone Buck, who lets a grin come into his face.

"Don't tell me this was an accident," the general manager begins on Buck. "You've pulled the air from the caboose too many times not to know how to do it properly. What's your alibi this time?"

"No alibi, sir. A blazing red fusee calls for emergency action. I obeyed."

"And tickled to death to get the chance." Bulger shakes his head knowingly. "You are altogether too smart, Buck Anderson. It's time I put a ring in your nose and tied you down somehow. You are rooting up entirely too much trouble for me on this division."

"I think the investigation will exonerate me of all blame," Buck says. "I only did my duty."

"There isn't going to be any investigation!" Bulger snaps. "Now, get along with you before I lose my temper. Which reminds me, you may send the bill for hauling this junk to my office. I'll see that it's paid."

"That's what I told the draymen," Buck tells him airily. "Thanks just the same."

Bulger just grunts at this and looks at his chewed cigar like it's not right. Maybe he's thinking about what new trainmaster and super he can send down to the Siwash to give Buck a run for his money, because Fanning and Hackett are going to be transferred to the Panhandle, where all good officials go before they are scrapped.

"G-r-umph!" I can still hear Bulger say as we start down the stairs. "Souvenirs for the super. G-r-umph!"

The Man Who Crossed the Continent in a Bus

By the Light of the Lantern

Ask us what you want to know

RAILROAD questions are answered here without charge, but these rules must be observed:

(1) Not more than two questions at a time. No queries about employment.

(2) Always enclose a self-addressed, stamped envelope, to facilitate our getting in touch with you if necessary. We will print only your initials.

(3) Don't be disappointed if answers do not appear at once. They are printed two months before date of issue.

HAS the Interstate Commerce Commission any jurisdiction over intra-state railroads, such as the Florida East Coast, Maine Central, etc.?

(2) *What is the difference between capacity and load limit, both of which are marked on freight cars? How can a car be loaded to more than capacity?*—G. B., Baltimore, Md.

(1) Yes, it has. Even the tiniest intra-state common carriers must ask the I.C.C. to abandon parts of their lines, to construct new road, or to do anything else which might be interpreted as affecting interstate commerce even remotely. In these cases, for example, it can be argued that traffic originating outside the state is carried on the road, and hence anything it does is of national concern. But while the jurisdiction of the I.C.C. has been widely extended, it does not cover such things as intra-state rates, which are left to the proper state governing bodies.

(2) The capacity of a car is the nominal load it is designed to carry in regular service, but cars are often loaded to more than capacity. In these cases the load must not exceed the load limit rating, which is defined as the weight of the load which when added to the light weight of the car gives the maximum axle loading allowed by the Association of American Railroads.

DO you think Diesel power will make much headway against steam?—J. B., San Diego, Calif.

Obviously, of course, we don't know, since only time and experience will decide the question. Right now it looks as though Diesel power will come into considerable use for switching and light passenger service, but that steam will hold its own in freight and heavy passenger service. There has been a great deal of talk about the relative advantages of both in newspapers and magazines these days, and in almost every case the writer has seen fit to compare a heavy steam train with a light-weight streamlined Diesel-powered train. This practice, we want to tell the world, is shamefully unfair to the steam locomotive. The only way to judge passenger hauling ability is to judge it on the basis of the number of people it will pull at the speed required, and thus to brag about the operating costs of a four-car Diesel train seating about 150 people as compared to those of a twelve-car steam train seating as many as 700 people simply will not do. It is also just as unfair to attribute to Diesel power the advantages that come to it as a result of streamlining and light-weight construction. There is no law, man-made or natural, compelling a steam locomotive to haul heavier equipment than a Diesel locomotive ordinarily hauls or not to take advantage of whatever benefits streamlining offers. We believe that the only fair method of comparing an articulated Diesel train such as the Burlington's Zephyr with a steam train is to build a steam locomotive designed to pull cars of the same weight and capacity as the Zephyr's and substitute it for the motive power car of the Zephyr; and the only way to compare a high-horsepower Diesel locomotive with a steam locomotive of similar capacity is to couple them to identical trains. To point to the fact that the Union Pacific's streamlined Diesel train ran from coast to coast on about $80 worth of oil, whereas a heavy 13-car steam train would require about $450 worth of coal is to overlook not only the fact that the steam train carries five times as many people, but also that fuel expense is a very small part of motive power costs.

J. M., Madison, Wis.—One of the best indices of all the important railroads of the world is the "Universal Directory of Railway Officials and Railway Year Book," published by the Directory Co., 33 Tothill St., Westminster, S. W. 1, London, England. In it you will find addresses of

Picture by Sovfoto; from Locomotive Photograph Co., Box 6364 W. Market St. Station, Philadelphia, Pa.

Here She Is—Europe's Largest and Most Powerful Locomotive, and the World's Only Engine with a 4-14-4 Wheel Arrangement. Although No Heavier or More Powerful Than American Engines with Fewer Wheels, This Recently-Completed Russian Giant's Weight Had to Be Spread over 11 Axles Because of the Russian Weight Restriction of 44,000 Lbs. per Axle. She Has 29½x31⅞ Cylinders, 63-in. Drivers, 242 Lbs. Pressure, Weighs 458,435 Lbs. without Tender, Exerts 88,250 Lbs. T. F. She Embodies a Lot of Novel Details, Including a Tandem Main Rod Connected to the Fourth and Fifth Set of Drivers, and a Jointed Eccentric Rod. The Above Photo Was Taken After She Had Completed Her First Run

the South American lines you want. It is full of useful railroad statistics, as well. You can probably refer to it at any good-sized library.

RECENTLY I read that a Chicago railroad had practically eliminated nosing or truck oscillations on their fast trains by turning the wheels without tapers. Is this practice feasible for lower speeds, and does it cause wheels to wear faster?

(2) *About how many railroad and trolley enthusiasts are there in the United States?*—L. F. C.

(1) Wheels with flat treads are now being tried out on the high-speed streamlined trains of the Burlington and Boston & Maine, and have been used successfully on the multiple-unit cars of the Illinois Central for many years. To study carefully the effect of flat treads, however, the Chicago, North Shore & Milwaukee recently equipped one of its cars with a floodlight and motion picture camera which took pictures of a wheel as it rode the rail at high speeds. Exhaustive tests showed that the regulation tread with a taper of 1 to 20 produced considerable nosing at speeds of 60-70 m.p.h., that a taper of 1 to 40 reduced the nosing remarkably, and that no taper at all practically eliminated it. Considering the fact that the brake shoes were made with a standard 1 in 20 taper, and that the rails were also worn to correspond to it, the wear on the wheels if anything was less than with the standard taper. This was especially true of the throat radius (where the tread ends and the flange begins). Moreover, the flat tread seemed to work just as well at low speeds.

(2) If you can count every reader of this magazine as a railroad enthusiast (and why not?), there are more than 300,000 in the country. If you count only those who make an intensive hobby of the subject, we'd guess at about 1/5 that number.

Photo by R. H. Kindig, 3811 Federal Blvd., Denver, Colo.

Denver & Rio Grande Western No. 3401 (2-8-8-2 Type) Hauling a Denver & Salt Lake Freight Train About 15 Miles East of Moffat Tunnel, on the Main Line of the D. & S. L.

RECENTLY I read that a LaPorte (Ind.) school teacher who is said to have invented in 1912 the railroad crossing slogan: "Stop, Look and Listen!" was killed in an automobile accident. Is it true that he invented the slogan? —A. G.

At the time the accident happened several of its readers put similar questions to the editors of the magazine "Letters." They replied: "The expression originated 70 years ago in a Pennsylvania Court. A judge instructing a jury in a railroad case declared it was up to the public to stop, look and listen before crossing the tracks. In 1879 Judge Edward M. Paxson of the Pennsylvania Supreme Court used the expression again, and a few years later Col. J. C. Fuller, vice president of the Gettysburg & Harrisburg (later Reading) read the Supreme Court decision, liked the phrase 'Stop, Look and Listen,' decided to adopt it as a slogan for crossing signs."

A. F.—The Waterville Ry was incorporated in 1909 and opened shortly afterward between Waterville & Douglas, Wash., 5 miles. It owns 1 gas car, 1 steam engine (photo on page 87), 1 coach and employs 4 people. Although its operating revenues have not exceeded $10,000 a year lately, it has managed to show some net income. Road and equipment are valued at $73,080, and total assets are $91,364.

W. S. Y., Minden, Nev.—The 3-ft. gage road running through Moss Landing, Calif., is probably what is left of the old Pajaro Valley Consolidated, incorporated in 1890 as the Pajaro Valley RR (name changed in 1897). Owned by the Spreckels Sugar Co., it ran from Watsonville to Spreckels, Calif., 40 miles, had 7 locomotives and 187 cars. After running up deficits for several years, it was abandoned in 1929 (the SP bought part of it, we are told), at which time road and equipment were valued at almost $600,000.

(2) See answer to W. O. S. in last month's issue for information about the California Central.

D. A., Baltimore.—The Syracuse, Phoenix & Oswego was chartered in 1871, finally opened in 1885, at which time it was reorganized and leased to the Rome, Watertown & Ogdensburg, now part of the NYC.

E. B.—The Canadian Pacific is building a semi-streamlined 4-4-2 type engine for high-speed passenger service. Photo of a model of it on page 86. The Canadian National, according to our latest information, has projected no such equipment.

(2) The following railroads operate in the province of Quebec:

Canadian National
Canadian Pacific
Quebec Central
Temiscouata
Montreal & Southern Counties (electric)
Roberval & Saguenay
Canada & Gulf Terminal
Quebec Ry., Light & Power
Napierville Junction
Alma & Jonquiere
Phillipsburg Ry. & Quarry

G. H., Granite City, Ill.—Nos. 7285 and 7299 of the Big Four were Class B-74, had 20 x 26 cylinders, 51-in. drivers, 180 lbs. pressure, weighed 135,000 lbs., exerted 31,200 lbs. t.f. They

Photo by J. S. Powell, 409 Lincoln Ave., Prospect Park, Pa.

Just a Little Scene in the Evolution of Transportation—a Horse and Buggy, Big-Wheeled Touring Car and Pennsy Passenger Train, All Snapped Together One Fine Day in 1910

were practically the same as Class B-99 of the NYC, Nos. 9520-9522 of which (still operating) weigh 133,500 lbs. and have a 4-inch shorter wheelbase.

(2) Nos. 6301-6305 of the Big Four are Class F-61; Nos. 6306-6308, F-61a; Nos. 6312-6313, F-62a; Nos. 6314, 6381, 6384, 6385, F-64. All are 4-6-0.

L. E. M., Everett, Wash.—The Louisville & Nashville handles a large volume of freight over its line between Louisville and Cincinnati, since it is part of the main line between Cincinnati and New Orleans. No Negroes are employed as firemen or brakemen between the two cities first-mentioned.

(2) The Southern's line between Cincinnati and Chattanooga handles a great deal of freight traffic. A few Negro firemen are employed between these points.

R. H.—The Black Mountain RR was incorporated in 1917 and acquired in 1923 by the L&N, which paid $1 a year rental and agreed to pay all expenses and keep it in good shape. It runs 8 miles between Blackmont and Alva, Ky. Road and equipment are valued at $390,229.

(2) The Tennessee, Kentucky & Northern was incorporated in 1904 as the Overton RR, and its name was changed in 1912, when it reorganized. It ran between Algood and Livingston, Tenn., 19 miles, had 3 locomotives and 6 cars. Its abandonment was authorized late in 1933, at which time it employed 15 people. It enjoyed the distinction of being one of the few railroads to have a woman president (Mrs. Phoebe Clark—see "Madame President," by Chas. F. Carter, in our June, '35, issue).

R. R.—The Pennsy's system of numbering its catenary poles is simple: 47-12, for example, means that the pole is 47.12 miles from the terminal (Jersey City for the N. Y. Division, and Broad Street Station on lines west and south of Philadelphia); 54-50 means that it is 54½ miles from the terminal, etc.

(2) The Pennsy is electrifying its Long Branch line only as far as South Amboy (Lawrence Harbor), and has not yet decided on electrification of through service on the branch.

WHAT are the advantages and disadvantages of the steel jacket on the New York Central's "Commodore Vanderbilt" locomotive?

(2) *Please print a brief history of the Temiskaming & Northern Ontario Ry.*—J. McF.

(1) The "Commodore Vanderbilt" is simply a standard Hudson type locomotive shrouded in a long hood. Its advantages are not very startling, since the hood is not streamlined enough to cut down wind resistance appreciably at even high speeds; it is probably worth more to the NYC as a publicity getter than as a motive power improvement. Its disadvantages, of course, are decreased accessibility of working parts, cost of installing the hood, and (to many but perhaps not all people) the fact that it hides the natural grace and balanced design of one of America's best looking locomotives.

(2) The T&NO, which is and always has been

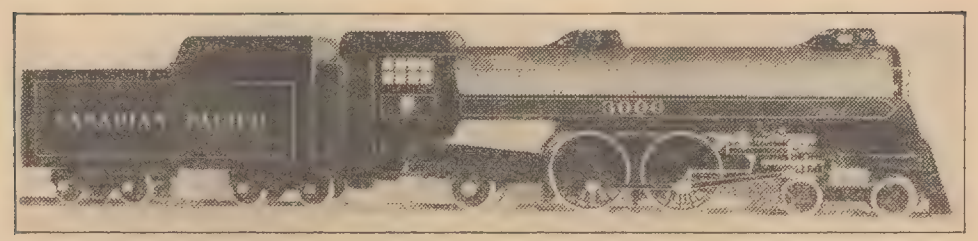


Photo from C.P.R.

Model of One of the Canadian Pacific's Five New Semi-Streamlined, Light-Weight Steam Locomotives Which Will be Used in Fast Passenger Service Between Montreal and Quebec. They Will Have 16¾x28 Cylinders, 80-Inch Drivers, 300 Lbs. Pressure, Weigh 250,000 Lbs. without Tenders, Exert 25,000 Lbs. T. F. The C. P. R. Is Building Them

owned and operated by the Ontario provincial government, was authorized to be constructed in 1902. It expanded steadily, and today its main line runs between North Bay and Moosonee, Ont., 440 miles, and its total mileage (including the Nipissing Central) is 594. It owns 63 locomotives, 520 freight, 66 passenger and 306 miscellaneous cars, and employs about 1,350 people. It has not lost money, and although 1934 was better than 1933, it was not up to 1929 and 1930. At present the Canadian Locomotive Co. is building two new 4-8-4 types for the railway. They will have 22½ x 30 cylinders, 69-in. drivers, 275 lbs. pressure, weigh 370,000 lbs., and exert 54,500 lbs. t.f.

F W. W. and E. J. O.—The Fonda, Johnstown & Gloversville operates four steam engines: Nos. 8 and 9, 4-4-0 type, with 18 x 24 cylinders, 58-in. drivers, 165 lbs. pressure, 96,000 lbs. wt., 15,795 lbs. t.f., built by Alco in 1900. No. 14 is 0-6-0, has 21 x 26 cylinders, 51-in. drivers, 180 lbs. pressure, weighs 150,000 lbs., exerts 34,400 lbs. t.f., built by Alco, 1926. No. 11 is 0-8-0, has 25 x 28 cylinders, 51-in. drivers, 175 lbs. pressure, weighs 215,000 lbs., exerts 51,000 lbs. t.f., built by Alco, 1923. Photo of No. 9 at bottom of page.

MoP No. 1486, 2-8-2 type, has 27 x 32 cylinders, 63-in. drivers, 190 lbs. pressure, weighs 333,000 lbs. without tender, exerts 59,800 lbs. t.f., 68,675 lbs. with booster; built by Alco, 1923.

Boston & Albany Nos. 240-242, 4-4-0 type, have 19 x 24 cylinders, 69-in. drivers, 180 lbs. pressure, exert 19,210 lbs. t.f. We have no data on Pittsburgh, Chartiers & Youghiogheny engines; we hope to print a Canadian National roster in a future issue.

F G., Woodhaven, N. Y.—Except for a few experimental rail-buses and rail-trucks, no railroad equipment uses rubber tires, and therefore we cannot pass judgment on their possible success. While signal operation would present

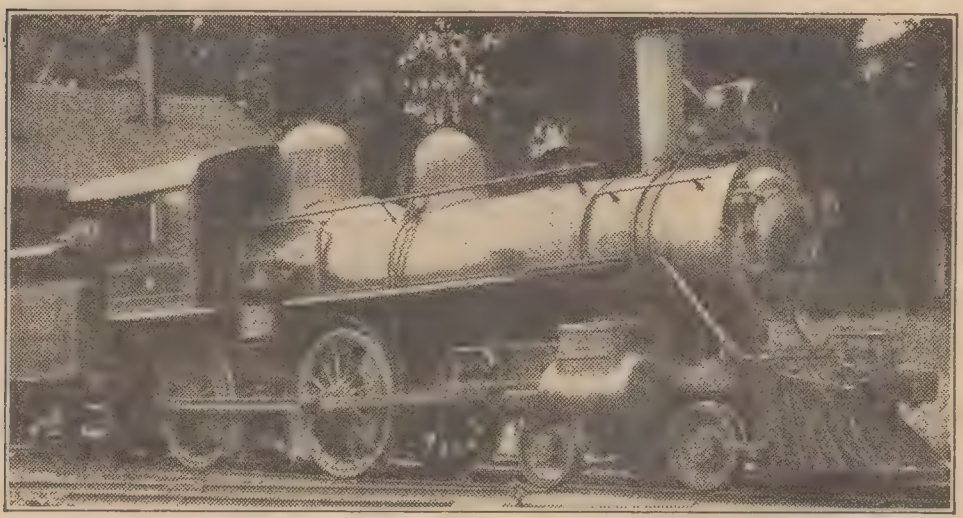


Photo by F. W. Weingetz, Jr 3761 118th St., Richmond Hill, N. Y.

This Eight-Wheeler Is No. 9 of the Fonda, Johnstown & Gloversville. See Answer to F. W. W.

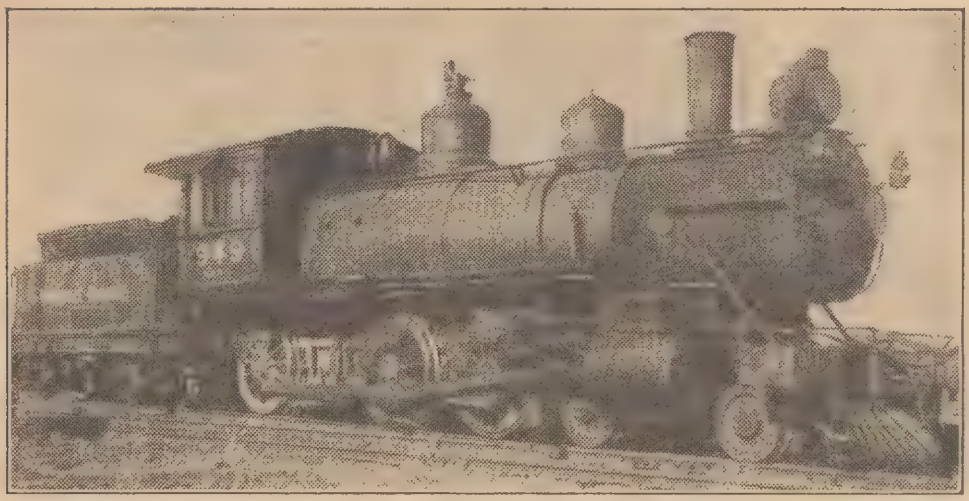


Photo by A. Farrow, 132 10th St. S. E., Auburn, Wash.

Despite Her High Number, No. 949 Is the Only Engine Owned by the Waterville Ry. (See Answer to A. F.). You See, She Used to Be No. 949 of the Great Northern, and When the Waterville Bought Her They Didn't Bother to Change Her Number

some problems for them, we doubt that this would be the main reason for their not being successful.

(2) Many Pullmans and private cars are equipped with both baths and showers. Water is stored in tanks on or under the car, and generally heated by steam from the locomotive.

HOW many passenger terminals are there in Chicago and what roads use them?—W. F., Linfield, Pa.

There are eight: (1) the Dearborn, at Dearborn & Polk, used by the Santa Fe, C&EI, Chicago & Western Indiana, Monon, Erie, Grand Trunk, Wabash; (2) the Grand Central, at Harrison and Wells, used by the B&O and B&OCT, Great Western, Pere Marquette, Soo Line; (3) Union, at Canal and Adams, used by the Alton, Burlington, PRR, Milwaukee; (4) the Central, at 12th and Lake Front, used by CSS&SB, Big Four, IC, and Michigan Central; (5) La Salle St., at La Salle and Van Buren, used by the NYC, Rock Island and Nickel Plate; (6) C&NW, at Madison and Canal, used by C&NW; (7) Wells St., used by Chicago, Aurora & Elgin; and (8) the various stations of the Chicago, North Shore & Milwaukee.

C. R., Cincinnati.—The Cincinnati Northern was incorporated in 1880, opened in 1882 between Cincinnati and Dodds, O., 36 miles, and consolidated with the Toledo, Cincinnati & St. Louis in 1883. However, this union was broken up that very year; and two years later the CN was reorganized as the Cincinnati, Lebanon & Northern, controlling interest in which was acquired by the PRR in 1896.

(2) The Atchison, Topeka & Santa Fe was chartered in 1859 as the Atchison & Topeka, but changed in 1863 to AT&SFRR. Construction was begun in 1869, and a portion of the line was opened in 1873. In 1895 it was reorganized as the AT&SFRy, its present title. It owns and controls the Gulf, Colorado & Santa Fe and Panhandle & Santa Fe, all three being known as the Santa Fe System.

W. O. S.—The Calif. Western RR & Navigation Co. was incorporated in 1905 and now operates 52 miles of line with branches (main line runs between Ft. Bragg and Willets), has 5 oil-burning locomotives, 5 passenger (incl. 2 motor), 46 freight and 20 miscellaneous cars. It employs about 85 people, and is owned by the Union Lumber Co.

C. H., JR.—The Macomb, Industry & Littleton was chartered in 1901 and opened in 1904 as the Macomb & Western Illinois. In 1908 it had one steam engine and one electric motor, 2 passenger and 7 freight cars. It was 19 miles long, is now abandoned.

(2) The Galesburg & Great Eastern was a reorganization (in 1898) of the Galesburg, Etherly & Eastern. It runs 10 miles between Victoria and Watega, Ill., has one locomotive and one car. In 1934 it showed a deficit, but in 1933 it made a little money.

WHAT is a cross-compound?

(2) *How did the Atlantic, Prairie, Mogul and Berkshire types get their names, and when did each appear?*—A. K.

(1) A compound locomotive with two cylinders, the one on the left usually being the high-pres-

sure or small cylinder, and the one on the right the low pressure. Because the steam is exhausted from the former across to the latter, the name cross-compound was pinned to the engine.

(2) The first Atlantic (4-4-2) was built by Baldwin in 1895 for the Atlantic Coast Line; hence the name. The first Prairie (2-6-2) was built in 1900 for the Burlington, which designed it to be used for heavy freight across the prairies. Although many engines with a 2-6-0 wheel arrangement had been previously built, the first real Mogul was constructed by Rogers in 1863 for the N. J. Railroad & Transportation Co. The term Mogul was used to indicate the general, all-around superiority of the type. The first Berkshire (2-8-4) was completed by Lima in 1925 and tried out on the Boston & Albany for heavy freight work in the Berkshire Mountains of Massachusetts.

T. G.—The following steam roads operate in Missouri:

Alton
Alton & Southern
A.T.&S.F.
B&O
Bevier & Southern
Cassville & Exeter
Chicago & Eastern Ill.
Burlington
Cape Girardeau Northern
Chicago, Springfield & St. L.
Chicago Great Western
Milwaukee Road
Rock Island
Big 4 (NYC)
Hannibal Connecting
Ill. Central
Ill. Term.
Kan. & Mo. Ry. & Term.
Kan. City Connecting
Kan. City Southern
Kan. City Term.
Kan., Okla. & Gulf
Louisville & Nashville
Mo. & Ill. Bridge & Belt
Mo & N. Ark.
Mobile & Ohio
Manufacturers Ry.
Mo.-Ill.
M-K-T
Mo.P
Mo. Southern
Nickel Plate
Ozark Southern
PRR
Quincy, Omaha & K. C.
Rockport, Langdon & Northern
St. Joseph & Grand Island (UP)
St. Joseph Belt
St. Joseph Term.
St. Louis & Hannibal
St. Louis & Troy
St. Louis-San Francisco
St. Louis Southwestern
Shelby County
Shelby Northwestern
Southern
Term. R.R. Asso. of St. Louis
Union Pacific
Union Term. of St. Joseph
Wabash

G. J.—The Grand Trunk Western, 1,066-mile Canadian National subsidiary whose main line runs between Chicago and Sarnia, operates independently of the parent company. It hires American crews, American section men, is under the jurisdiction of the I.C.C.

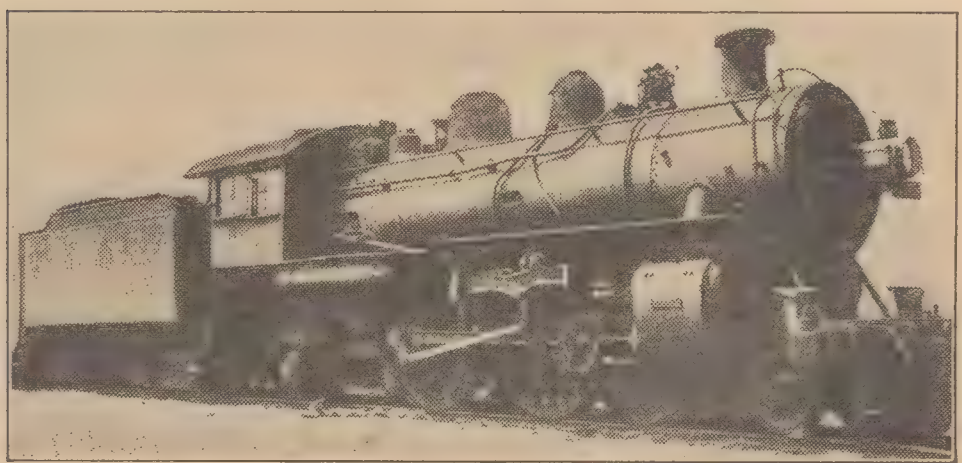


Photo by H Newton

No. 9200, One of the Pittsburgh & Lake Erie's 5 Atlantic Types, Snapped at McKees Rocks, Pa.
See Roster of P. & L. E. on Pages 90 and 91

Photo from L. L. Reise, 1711 22nd St., Des Moines, Iowa

This Ancient 0-6-0 Boasted the Hopeful Name "Economy," and She Belonged to the D. C. C. R. R. Does Anyone Know What D. C. C. Stands For? If You Do, Both Mr. Reise and Ourselves Will Be Glad to Hear from You

R. N., Brooklyn.—The tenders of M-K-T Class L-2 (2-8-2—Nos. 836-920) which burn oil weigh 215,800 lbs., hold 4,000 gals. oil and 10,000 gals. water. Some of this series burn coal, however, and their tenders weigh 193,800 lbs., hold 19 tons coal and 10,000 gals. water. The coal-burners have no tender boosters.

(2) The difference in operating costs between coal and oil depend mainly upon the price of the fuel, which varies in different sections of the country. Thus it cannot be said that oil is cheaper than coal or coal than oil.

E. S.—The 2-10-2 types of the New Haven are more powerful than the 2-8-4's of both of the B&A and B&M.

(2) New Haven Nos. 3200-3249, 2-10-2 type, have 30 x 32 cylinders, 200 lbs. pressure, 63-in. drivers, weigh about 360,000 lbs. without tender, exert 77,800 lbs. t.f. Nos. 3300-3348 have 27 x 30 cylinders, 200 lbs. pressure, 69-in. drivers, weigh about 334,000 lbs. without tender, exert 53,900 lbs. t.f.

D. G. B.—The Denver & Salt Lake was incorporated in 1925 as a reorganization of the old railroad of the same name, which in turn was organized in 1913 as the Denver, North Western & Pacific. It is 232 miles long, has 58 locomotives, 669 freight, 25 passenger and 203 miscellaneous cars. During 1934 the average number of its employees was 535, and the total payroll was $1,794,673.

(2) We have been able to get very little data on the D&RGW's narrow gage engines. The largest, however, is a 2-8-2 type with 20 x 24 cylinders, 200 lbs. pressure, and 37,100 lbs. t.f.

Additions, Corrections, and Comments

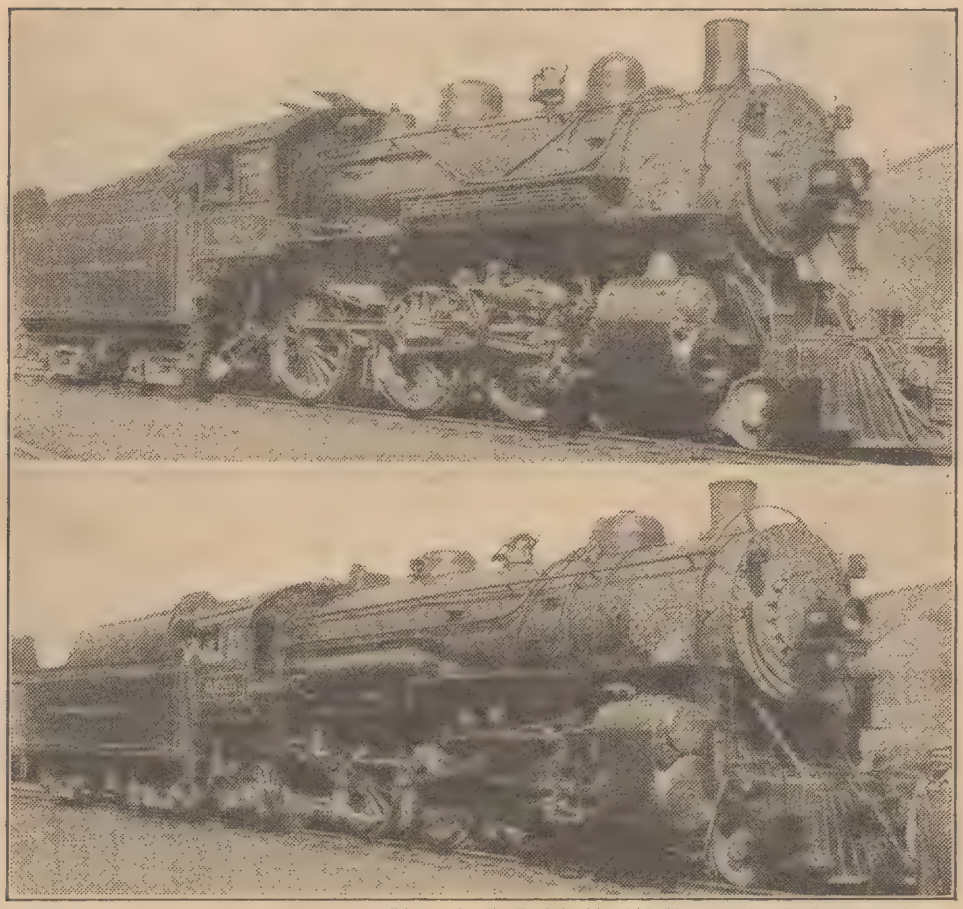
IN our December issue we told S. J. M. that we figured the NYC Hudson types would use about 8 tons of coal and 15,000 gals. of water pulling 12 Pullmans between Harmon and Albany, N. Y., 110 miles. We have been informed, however, that under good operating conditions 15 cars and more are regularly hauled on a ton or more of coal less than we had figured and considerably less water. The NYC practice is to make a 24-ton tank of coal last all the way from Harmon to Buffalo, 403 miles, although coal is generally taken 324 miles west of Harmon.

IN our November issue, in connection with a short history of the Las Vegas & Tonopah, we told W. O. S. we had no data on LV&T engines. To help us out, D. S. Richter of 1412 Sixth Ave., San Francisco, reports that eight of this road's engines were sold after it was abandoned in 1917: Nos. 4, 5, 8 and 12 becoming, respectively, Nos. 170, 171, 172, and 179 of the Northwestern Pacific (roster in future issue); and Nos. 7, 9, 10 and 11 becoming, respectively, Nos. 24, 25, 26 and 27 of the San Diego & Arizona (roster in last July issue).

BEFORE we forget about it, we want to tell you about a book that's been hanging around our office for some time, waiting to be reviewed. It's called "The Railway King"; it's written by a Briton named Richard S. Lambert; it's published by Messrs. George Allen & Unwin, Ltd., Ruskin House, 40 Museum St., London, W. C. 1, England (price 12 shillings sixpence—about $3.15); and it's the story of a man who could be called the Jay Gould or Sam Insull of English railroading—the famous (or infamous) George Hudson. The author never becomes very indignant, but rather seems to get a lot of fun out of telling about Mr. Hudson's rise and decline. Unlike Jay Gould, Hudson did a lot of constructive work, and if he had to resort to fraud to enable himself to control more than a third of England's railways by 1849, it can be said to his credit that somebody else would have done the same thing or even worse, times and the system being what they were. Like Sam Insull, Hudson spent his last years a "poor old man"; and he died unhonored, maybe, but not unwept or unsung.

Locomotives of the Pittsburgh & Lake Erie R. R.

Including Pittsburgh, McKeesport & Youghiogheny (PMcK&Y) and Lake Erie & Eastern (LE&E)



Photos by H. H Schodde, 548 W. Main St., E. Palestine, O.

(Upper) No. 9212, Now Scrapped, Which Had Same Dimensions as Class F-103A. (Lower) No. 9230, Light Pacific Type. All P. & L. E. Engines Are Labeled "New York Central Lines," Because the N. Y. C. Owns Half Its Capital Stock and Operates the P. & L. E. as Part of Its System. The Main Line Extends from Youngstown, O., to Pittsburgh (65 Miles); Pittsburgh to Brownsville (55 Miles); and Pittsburgh to Connellsville, Pa. (58 Miles)

Class	Numbers	Cylinder Dimensions (Inches)	Driver Diameters (Inches)	Boiler Pressure (Pounds)	Weight Without Tender (Pounds)	Tractive Force (Pounds)	Builder & Date Built
	Six-Wheel Switcher (0-6-0) Type—45 Engines						
B-104	9185-9191 (LE & E); 9036, 9038, 9044, 9045, 9047, 9049, 9051-9053, 9055-9057, 9060-9062, 9066-9070, 9123, 9124, 9126, 9131, 9135, 9137, 9140-9143, 9150, 9151, 9154-9157, 9159, 9160 (PMcK&Y)	20 x 26	50	200	153,000	35,360	Alco, P & LE, 1906-13
	Eight-Wheel Switcher (0-8-0) Type—25 Engines						
U-3J	9000-9024	25 x 28	51	190	230,400	55,420	Lima, 1929
	Mallet Switcher (0-8-8-0) Type—2 Engines						
NU-1B	9090-9091	26 & 40 x 28	50	200	468,000	90,700	Alco, 1916
	Atlantic (4-4-2) Type—5 Engines						
I-100A	9200-9204	20 x 26	72	200	186,800	24,550	Alco, 1903
	Ten-Wheel (4-6-0) Type—8 Engines						
F-103A	9205-9207 (PMcK&Y)	22 x 26	72	200	210,000	29,710	Alco, 1909 (F-103A)
F-105A	9220-9224 (PMcK&Y)						Alco, 1915 (F-105A)
	Pacific (4-6-2) Type—20 Engines						
K-4A; K-4B	9225-9234	23½ x 26	72	200	286,700	34,000	Alco, 1917, 18
	(These classes exert 44,500 lbs. t.f. with boosters)						
K-6A	9245-9249	26 x 28	75	200	298,000	42,900	Alco, 1925
K-6B	9250-9254	26 x 28	75	200	301,000	42,900	Alco, 1926
	(Classes K-6A and K-6B exert 52,620 lbs. t.f. with boosters)						

Consolidation (2-8-0) Type (in Yard Service)—37 Engines

G-102; G-102A	9338, 9340, 9373	21 x 30	50	200	192,000	44,980	Alco, 1903, 05
G-102D	9326, 9327, 9329, 9331, 9342, 9345, 9348, 9351, 9352, 9354, 9356, 9357, 9361, 9367, 9368, 9370-9372, 9375-9377; 9423 (PMcK&Y)	22½ x 30	50	200	200,500	51,638	Alco, 1902, 03, 05, 07
G-103	9378, 9385; 9485-9489 (LE & E)	21 x 30	50	200	192,000	44,980	Alco, 1910
G-104	9393-9397	22½ x 30	50	200	200,500	51,638	P & LE, 1913

Mikado (2-8-2) Type—91 Engines

H-8A	9502-9504; 9550-9554 (PMcK&Y); 9595, 9596 (LE & E)	26½ x 30	56	190	320,500	59,700	Alco, 1916
	(In Yard Service)						
H-8B	9555-9574 (PMcK&Y)	26½ x 30	56	190	332,700	59,700	Alco, 1917
	(This class exerts 70,000 lbs. t.f. with boosters)						
H-8C	9575-9579 (PMcK&Y)	26½ x 30	56	190	320,500	59,700	Alco, 1918
H-8D	9520-9524	26½ x 30	56	190	322,700	59,700	Alco, 1920
	(Classes H-8C and H-8D used in yard service)						
H-9A, B, C, D	9505-9519, 9580 9589; 9590-9594 (PMcK&Y)	27 x 32	63	190	331,000	60,000	Alco, Baldwin, 1918, 19
	(These classes exert 69,900 lbs. t.f. with boosters)						
H-10A, B	191-211	28 x 30	63	200	341,600 / 337,000	63,450	Alco, 1923, 24
	(These classes exert 74,650 lbs. t.f. with booster)						

Total number of engines: 233

Photos by Homer Newton 243 Chesterfield Rd., Pittsburgh, Pa.

(Upper) Consolidation Type No. 9354; (Lower) Mikado Type No. 9504. Photo of No. 9200 on P. 88

NEXT MONTH : NORFOLK & WESTERN

Electric Railway Stamps

By ROBERT WHITE

Ex Section Foreman, Grand Trunk Western; Box 425, Pontiac, Mich.

SWITZERLAND has, perhaps, the best electric stamps. Switzerland, with many tracks crossing it, is called "the railroad turntable of Europe." Strange that its first railroad stamps should not appear until 1934! In fact, so far I know, the last railroad stamps issued in 1934 were the first real railroad stamps of Switzerland. This issue—and I only consider 3 of the set to be railroad stamps—show scenes on the Gotthard Route. The Swiss Federal Government took over all the important lines of the country in 1898. Since 1913 they have been gradually electrified.

In the design of the 10 centimes, down in one corner you can see the tracks of an international line running from Paris-Lausanne-Simplon—in other words, between France and Italy via Switzerland. On January 26, 1906, the first train on this line went through the Simplon Tunnel.

The 20 centimes stamp gives a view of the main tracks of the Gotthard Route. The idea of building a railroad through the Swiss Central Alps was first conceived in the 'fifties. The realization, however, became possible only after the hand-drilled Mont Cenis Tunnel (now the world's fifth longest railroad tunnel) was bored and the rails laid across the Brenner. On October 15, 1869, Switzerland made an agreement with Italy and Germany to form a railroad company. After some delay, the company was really formed December 6, 1871. Then by an agreement in August, 1872, Louis Favre, a Geneva contractor, was intrusted with construction of the tunnel. The original cost of this tunnel—8.78 miles in length, with two tracks—was a little over 60,000,000 francs. The tunnel was pierced February 29, 1880. Louis Favre had died of a stroke a few months before, while inspecting the work. A monument to this great contractor is in the cemetery at Goschenen.

The Only Electric Railway Stamp Issued by Spain. It Was Printed in 1930 for the International Railway Congress

The Devilbridge is pictured on the 25 centimes stamp. This is not a railroad structure but a public road bridge. Just to the rear, however, is a span of the Goschenen-Andermatt, a narrow-gage cog railway. As for this being a railroad stamp, well, you can call it that if you want to, although the Devilbridge hides the railroad span from view. The Goschenen-Airolo branch of the St. Gotthard was opened for traffic January 1, 1882, and in June of that year through service was inaugurated between Lucerne and Chiasso.

The 30 centimes stamp shows the Rhine-falls in northern Switzerland. On this stamp can be seen the railroad bridge over the Rhine, on the Zurich-Schaffhouse branch. Although this bridge is shown intact, a stamp issued by the country of Liechtenstein pictured a railroad bridge over the Rhine that has been washed out.

A Panama stamp issued in 1918 pictured an electric towing engine. In 1930 when Spain put out a set of stamps for the Inter-

The Four Stamps Issued by the Russian Government to Commemorate the Opening of the Moscow Subway Line

national Railway Congress a large electric locomotive was used for the special delivery. This is the only electric stamp in the whole set, which I have in my collection. The other nineteen of the set are steam, even to the air-post that shows a steam locomotive below a plane.

Guatemala in 1930 surcharged five stamps as the provisional issue for the opening of the Los Altos Electric Ry. Perhaps the steam fans down there had something to do with the set. Although those stamps were supposed to honor an electric railway, their design shows a steam train. However, if the steam fans had anything to do with this, the joke is on them, as the steam train is crossing a viaduct to the penitentiary! Later that year the country issued a set of three Los Altos Ry. stamps showing a power dam, tracks and station.

In 1932 Australia showed the Sydney Harbor Bridge on stamps. This bridge is supposed to be the world's largest single-arch structure. Aside from having a roadway and a footpath, it has a capacity of 80 electric trains per hour in each direction on the four tracks across it.

The world's smallest republic, San Marino, used an electric car as the main design on a set of four stamps in 1932. The view is at the terminal in the City of San Marino. These stamps were issued for the opening of this line from San Marino to Rimini in the world's smallest republic.

Russia, 1935, went in for subway stamps. So far I know, the four stamps of this issue are the only ones to show subway scenes. In the designs are electric cars as well as a view showing one of the tubes during construction. These stamps were issued for the opening of a twelve-mile section of the Moscow Metropolitan Railways, built in less than two years. It is said to be the world's most beautiful underground railway. The stations are veritable palaces, with marble columns and pink steps. New York's city-owned " Independent " subway system is clean, beautiful, modern and efficient, but it can't beat the Moscow line.

A postage stamp does not have to picture a train or locomotive to be listed as a " railroad " subject. Take the 4c. U. S. stamp of 1901. This shows only an automobile and two persons, yet it is a railroad stamp.

Its design came from an actual photograph of an electric automobile owned and used by the Baltimore & Ohio Railroad in Washington, D. C. The B. & O. used such automobiles at that time in Chicago and New York also. The passenger shown on the stamp was S. B. Hege, who was then B. & O. general agent in Washington. Mr. Hege was born August 7, 1855, and entered the railroad service April 1, 1885, as special passenger representative. He was B. & O. passenger official in Washington from January 1, 1890, until his retirement, March 1, 1920. He died in 1929.

You cannot find such information in any stamp catalog; you have to get out and dig it up. If you put the 5c. stamp in that set under a strong magnifying glass you will see two street cars crossing a bridge over Niagara Falls. This is the only U. S. stamp, so far as is known, containing a trolley car picture!

International Engine Picture Club

READERS who collect, buy, sell, exchange, or make pictures of locomotives, trains, cars, etc., are listed here as members of the International Engine Picture Club. There are no fees, no dues. Names are published in good faith, without guarantee.

A membership button is given FREE to those who send in a "Readers' Choice" coupon (page 143) and self-addressed stamped envelope. (If you live in Canada or any foreign land, enclose a loose 3c stamp from your own country instead of the envelope.) Address Engine Picture Editor, "Railroad Stories," 280 Broadway, New York City. Tell him what you want or what you offer.

SUNDAY excursions of railroad fans seem to be the style these days. Several model, enthusiast and historical groups have been sponsoring trips to railroad shops or other points of interest, and each time, we are glad to report, they have been treated like kings by the railroad people. Nevertheless, until recently no railroad has taken the initiative in such an excursion, apparently because none of them realized how many railroad-minded people were in existence.

A couple months ago, however, W. T. Gaynor, New York Central's assistant advertising manager, decided that it was time for the N.Y.C. to take the lead in this sort of thing, so he arranged for a trip from New York City to and through the West Albany shops and return (approximately 300 miles) for $2.50. Setting the date for November 17th, he sent out letters about it to several thousand railroad fans in the New York area. Then he prayed that the weather would be nice, and that if it was maybe a hundred people would be there.

Well, the weather wasn't nice. In fact, it was one of the worst Sundays of recent years, and a gale was blowing everything from driving rain to sleet and snow all day long. But did that daunt the railroad enthusiasts? It did not. Almost 500 of them turned out, and the New York Central had to run a solid train of 12 coaches, three diners and an observation car to take care of the crowd. Instead of proceeding straight to Albany, the train crossed the Hudson south of Albany on the Castleton Cut-off (A. H. Smith Memorial) bridge, poked into the Selkirk Yard to watch things there, and spent the afternoon in the West Albany shops, where everyone present was shown everything he wanted to see and given a chance to blow the whistle and ring the bell on a live locomotive, to boot.

Undoubtedly other railroads will be willing to lend their ears (and their equipment, too, we hope) to such propositions as this. Now is the time for you people in Chicago, in the Twin Cities, in Seattle, in San Francisco, or in any other railroad town to

write to the passenger agents of your railroads and sound them out on similar excursions.

* * *

Down in Tampa, Florida, we are happy to report, lives the youngest member of the International Engine Picture Club so far discovered—Yvonne Porter, born August 5, 1935. She asked for her I. E. P. C. button on August 19th, and it was duly sent her as fast as the mails could carry it. She lives with her mother and dad (an ardent I. E. P. C. member) at 1022 19th Ave., Tampa, Fla., and although she will be glad to hear from other members, she cannot promise to reply until she has had a chance to develop her writing ability a little more.

* * *

We're sorry to tell you there were a couple of errors, last month, in Fred Jules' article on photographing moving trains: (1) the words "ground glass back" should not have been used to describe the direct finder, since the type Mr. Jukes referred to is either open or fitted with sighting lens and square minus lens, and never uses a ground glass back; and (2) the photo of the narrow-gage train on page 95 was taken not seventeen, but twenty-seven years ago. Both mistakes were ours.

* * *

B. L. AHMAN, Jr., 3313 Westerwald Ave., Baltimore, Md., has 84 different 116 size snaps of 11 N. & S. Car. roads, $1 per dozen, or $3 for 3½ dozen.

G. B. ALLEN, 6306 Cottage Grove Ave., Chicago, Ill., has Sept. '34 Official Guide, and Yosemite Valley, Mid. Con., FSS&RI, WSS&YP and other emp. timetables for others or pictures.

L. G. AREND. 729 S. Front St., Franklin, O., wants old CH&D, CG&P, Licking R., Laurel and Mountain Cent. snaps; will buy or trade many short lines, aband. and modern power.

W. R ARNOLD, 3811 Peters Ave., Sioux City, Iowa, wants lists and photos of interurbans, esp. Iowa and Ind. and MC&CL.

E. ATWOOD, 834 Jackson St., Albany, Calif., starting, send lists of trolley and electric lines in west and mid-west.

J. H. BAILEY, 509 B St., Bakersfield, Calif., starting, wants 116 size photos.

R. BIERMANN, R. 1, Box 196B, Hemet, Calif., sells prints, 6c. ea., 2 for 10c., 15 for 50c., 35 for $1; also trades tts., stamps, clippings, etc., for your negs. or prints.

B. E. BISHOP, 856 Main St., Santa Clara, Calif., trades and sells copies of "RR Telegrapher," emp. tts. and train orders for time cards WP, LA&SL, PE, GN Klamath Falls Div. and all small roads.

H. BLACKBURN, Smithville, W. Va., has old Nat. Geog. Mags. to trade each issue for one issue "Railroad Stories." Also has Milwaukee, L&N prints and colorprint of world's first horseless carriage for sale or trade.

C. M. BRAY, Miss. SCS-13 Camp, Holly Springs, Miss., has collection 200 railroad passes from Civil War to about 1877; what do you offer?

D. BLESER 53 Jarvis Pl., Lynbrook, N. Y., wants all eastern road photos.

C. M. BOND, Frannie, Wyo., has many 116 and p.c. size eng. snaps and negs. for sale or trade; send your list.

J. F. BOOSE, 35 N. LaGrange Rd., LaGrange, Ill., wants 116 size odd and extinct classes of C&NW, CMStP&P, Soo Line, PRR (esp. old lines west) prints or negs.; will trade double or pay cash; also wants TP&W CStPM&O., DSS&A.

O. R. BREWER, 2360 St. James Ave., Cincinnati, O., starting trolley transfer collection; wants to hear from foreign fans.

* * *

W. A. CAIN, 1068 Stuyvesant Ave., Trenton, N. J., sells trolley and inter. photos; 3c. stamp for list.

S. CAMPBELL, Mayetta, Kan., has 2¼x3¼ of Rock Is. and UP.

V. CASPER, 100 Rocklyn Ave., Lynbrook, N. Y., wants PRR, NYC, Erie, CNJ, LV photos.

E. S. COLE, 6433 Market St., Upper Darby, Pa., wants to trade set of "Encyclopedia of RRg," or one "Moody's R.R. Manual," 1930, for good copy "Poor's Manual of RRg." of 1891, 1892 or 1893; also trades other railroad books.

R. COLE, 1640 Broadway, San Diego, Calif., will trade SP, WP, and Nev. Co. N.G. for D&RGW and other Colo. roads.

A. J. COMSTOCK, 176 Highwood Ave., Leonia, N. J., has many trolley photos, tickets, transfers, tts., to trade.

D. H. CORNISH, 1262 Edwards Ave., Lakewood, O., has many '33 and '34 "Railroad Stories" to sell whole or separate; also wants to hear from RR poem collectors.

Photo by R E. Lord, Gaylord, Kan.

On the "Armstrong" Turntable at the End of the Missouri Pacific's Central Branch at Lenora, Kan.

L. CRAIG, 114 Greenleaf, Peoria, Ill., has 116 size prints and negs. around Peo. to sell or trade for others or following "Railroad Stories": any before Nov. '32 except July, Aug., Oct., Dec. '30; Feb., Apr., July, Aug. '31; Jan., Dec., '33; Feb., Apr., '34.

G. W. CROSWELL, 3349 Cheviot Ave., Cincinnati, O., has 116 size Big 4, PRR, L&N, C&O, B&O, N&W trains in motion, 10c. ea.

* * *

A. DAVIDSON, 7223 Sheridan Rd., Chicago, trades transfers, tokens and trolley photos; will trade a photo of engine head-on collision or "4001" silent trolley for small cities' transfers. Also wants loan of Apr. '33 "Railroad Stories" from Chicago fan.

R. H. DAWSON, 345 Diamond Blvd., Johnstown, Pa., has PRR calendars '26-'31 and '33, 50c. ea. plus postage; also emp. tts for sale.

G. R. DRIGGERS, McKenney, Va., will trade 2 SAL train orders for 1 recent of ea. railroad, or will trade 5 SAL train orders for ea. 116 size side view print, no foreign. Also wants Dec. '29, some '30, '31 "Railroad Stories"; write.

* * *

C. F. EATON, 11 Potter Rd., Framingham, Mass., wants 3x8 B&A prints.

G. R. EGGERS, 3069 Hobart St., Woodside, L. I., N. Y., wants books with histories of electric railways in U. S. Also wants Dec. '29-June '30, Sept.-Nov. '30; Jan., Mar., May, June, Sept.-Dec. '31; all of 1932 (exc. Oct., Nov.); Apr., Nov., Dec. '33 and Jan. '34 "Railroad Stories."

C. W. ELLSWORTH, Paw Paw, Mich., has 400-page "Travelers' Guide," 1882, with all U. S. and Canadian timetables. What offers?

* * *

R. FARNSWORTH, 219 E. Hortter St., Philadelphia, Pa., has many Reading pass. and emp. tts. to trade for prints and negs.

A. FEININGER, 195 Woodworth Ave., Yonkers, N. Y., has 116 size NYC elec. div. and trolley photos to trade or sell 10c. ea., 3 for 25c.; collects timetables.

C. FISHER, Jr., 2205 Prince, Berkeley, Calif., will pay cash for emp. time cards of aband. NWP Pt. Reyes Br., Col. Mid., SJE, Mt. Tam. & Muir Wds.; has 12 sltly. clipped "Railroad Stories" for best offer emp. time cards small roads.

M. FLATTLEY, 1543 W. 66th Ave., Oak Lane, Pa., wants certain 116 size neg. of PRR engines in central and western regions.

W. B. FRANCIS, Jr., 506 Rigsbee Ave., Durham, N. C., has N&W, Sou., SAL engine prints to trade or sell for other Southern R.R.

R. FRENZEL, 723 Wyoming St., San Antonio, Tex., starting; needs help.

* * *

E. GARDNER, 47 Charles St., Metuchen, N. J., wants tts. of these old roads: Miss.&Mo., Des Moines Vy., CH&D, Chi.&SW, IS&MS, M&LR, CO&G, Batesville & Brinkley, BCR&N, CD&Minn, CK&N and Raritan R.

T. A. GAY, 257 88th St., Brooklyn, N. Y., has p.c. size photos eastern roads at 5c. ea., or trade.

R. R. GOULD, Box 4174, Bellevue, Pa., makes prints up to p.c. size for 3c. ea. plus postage; in lots of 24 or more, pays postage. Send good negs. (returned promptly) and state whether you want glossy or dull.

* * *

N. HARDING, 29 Robins Ave., Hamilton, Ont., Canada, starting 116 size collection of old and modern engines and wrecks.

HAWTHORNE PHOTOS, 58 N. 14 St., Hawthorne, N. J., sells surprise pkgs. of photos, $1.10 ea.

G. E. HENDERSON, Box 476, San Francisco, Calif., starting; needs help.

E. G. HAUGHEY, 242 East F St., Colton, Calif., has 100 dif. U. S. loco rosters for sale, no trading; send 3c. stamp for list.

J. A. HINDS, 248 O'Connor St., Ottawa, Ont., Canada, is selling large collection of negs., mostly CNR and CPR, many U. S.; write for list.

H. K. HILLIER, Bishop's Falls, Newfdld, Canada, has 45 various mags. to trade for Jan.-Aug., Oct., Nov., '34 and Jan. '35 "Railroad Stories."

E. HOLMES, 358 St. Ann's Ave., N. Y. City, starting.

R. H. HORN, 1409 Center St., Bethlehem, Pa., wants to hear from all rail fans; trade emp. timetables and stamps.

A. HUDEC, 1217 Terrace Ave., Racine, Wis., wants to collect photo of ea. I.E.P.C. member; local fans write.

* * *

W. L. JENNINGS, 5 Cleveland House, Dorchester Rd., Weymouth, England, wants copies of Baldwin Records of Construction covering their 4-4-2, 4-6-2 and 2-8-2 types; also wants to hear from fan who sent him Pennsy photo with "Next Stop New York" on back.

C. JESSE, 608 Transverse Ave., Pittsburgh (10), Pa., will paint loco. pictures on order; any size or color for cash or what have you.

P. L. JOHNSON, R. 3, Box 220, Mt. Vernon, Wash., has Jan.-Aug. '35 "Railroad Stories" at 15c. ea. or trade.

T. JONES, 1537 Howard Ave., Utica, N. Y., sells tts. and engine photos; send dime for sample of either and list. Also has Aug. '35 Official Guide and Mar. '35 "Railroad Stories" to highest bidder.

* * *

F. KALAHAR, 1531 N. Willamett Blvd., Portland, Ore., wants MStL, IC, Ore. Elec., Southern and FtD-DM pub. tts. previous to 1920; write first.

H. W. KIRKPATRICK, 1158 Washington St., Bath, Me., has 616 size MeC prints at 4c. ea. or trade for same size other New England roads; also has train orders, emp. and pub. time cards, prints of many roads; send 3c. stamp for list.

W. C. KOOMAN, Clymer, N. Y., has Feb., Apr., May '35 Official Guides to trade for modern engine, station or ltd train photos.

E. KREMKOW, 2125 McKinstry, Detroit, Mich., wants Terre Haute Ind. and Eastern Traction Co. photo; also trades for other electrics.

* * *

N. LASELL, 517 Jefferson St., Waupaca, Wis., starting.

B. LEVINE, 203 W. 98th St., N. Y. City, has for sale at 5c. ea. or trade 200 Brotherhood and RR Trade journals; also juvenile railroad books and few "Railroad Man's." Wants "Railroad Man's" before 1919 and certain few 1930, '31, '32; also railroad books, histories, fiction, etc.

LOCOMOTIVE PUBLISHING CO., LTD., 3, Amen Corner, London, E. C. 4, England, has railroad booklets, photos, material, etc. Special sets of 25 dif. p.c. size photos at $1.50 postpaid. selection of 40,000 photos from all countries.

B. E. LEWIS, 411 Kinsey St., Raleigh, N. C., has following to trade for negs.: CG, C&O, Monon, DL&W, M&O, NYO&W, T&P, TH&B, Frisco, CNW, B&A, GN, M&StL, Erie, SD&AE, CofNJ, SAL, SOU, LV and others. Has prints of SAL, SOU, N&S, Erie, NYC, and others.

* * *

C. MacDONALD, R. 2, Box 508, Coconut Grove, Fla., has many boys' books and foreign stamps to trade for 116 size loco. prints, esp. SR&RL.

R. E. MACDONALD, 9942 115th St., Edmonton, Alta., Canada, has p.c. CNR photos and emp. time cards at 10c. ea. or trade; trades CNR train orders for others.

B. MACKEY, Potlatch Rte., Shelton, Wash., will trade A.F. catalog for any Pacific type locos.

E. MAY, 170-16 Highland Ave., Jamaica, L. I., N. Y., has 116 size of eastern roads to trade for any railroad material or negs.; send for list.

A. L. McCUNE, 23 Nairn Pl., Newark, N. J., will buy prints or negs. of PRR Class D-16sb locos. Wants all of '31 except Feb., Apr., July, Aug.; all of '32 and Apr., Nov., Dec. '33 "Railroad Stories." Has all '34 and '35 issues.

H. H. McGREGOR, 3239 St. John, Kansas City, Mo., wants Nov., Dec. '33 and Oct. '34 "Railroad Stories."

A. I. McKAY, 3451 Oxford Ave., N.D.G., Montreal, Canada, has CPR and CNR loco. prints to trade for D&H, CV, PRR and Santa Fe.

R. MITCHELL, 758 Newport Ave., Long Beach, Calif., will trade 3 size 116 prints Pac. Elec. or Santa Fe for any same size steam or elec. negs.

E. MORRISON, 1702 17th St., Port Huron, Mich., collects photos, emp. tts. and calendars; wants to hear from railroad men in Australia, S. Africa and England.

D. E. MORSE, 701 Hill Dr., San Gabriel, Calif., has 116 size PE, Los Angeles Ry. and San Diego Elec. to trade for Winnipeg, N. Ohio Inter., N. Y., Westchester & Boston, Chicago surface lines or International Ry. Also trades PE pub. tts. for NWP inter., old CSB&NI (before '20) and old N. Ohio Inter. C. Smallwood, please write.

* * *

D. NELSON, 837 23rd St., Ogden, Utah, beginner; send lists.

J. O'KEEFFE, 317 Mountain Ave., SW, Roanoke, Va., has N&W emp. tts. to trade for U. S. stamps; write first.

W. R. OSBORNE, 38 Colonial Ave., Whitehorse, Trenton, N. J., has p.c. size B&O, Rdg., CNJ, LV, C&O, PRR, RF&P, and other U. S. and foreign at 10c. ea. plus postage; 25c. for large lists and sample.

* * *

A. PEARSON, 1387 E. Blvd., Cleveland, O., has 1917 Colo. & Sou., Rock Island and D&SL time tables for best offer in "Railroad Man's" before '30 or loco snaps or cash. Wants to hear from Cleveland fans wanting to form club.

H. PEARSON, 120 Main St., Ossining, N. Y., has following "Railroad Man's" for sale to highest bidder: Sept., Oct., Dec. '17; Jan., Feb., Mar., May '18 and Jan. '31.

H. J. PEDERSEN, P.O. Box 216, Moclips, Wash., starting western roads; help appreciated.

L. G. POOLE, 20 Oak Grove, E. Malvern, S. E. 5, Melbourne, Australia, has 3x5 photos of Victorian Govt. engines dating back to 1860 to trade with U. S. and Canadian fans (5c. postage).

E. W. POTTER, 1022-19th Ave., Tampa, Fla., wants diamond-stacks, Mother Hubbards, odd types, n.g., streamline photos or negs. Has SAL and ACL loco prints to sell or trade; foreign fans write.

* * *

W. E. REAGLES, 2451 N. 46th St., Milwaukee, Wis., has hunting, fishing and nature mags. to trade for engine prints.

J. REED, 1605 Kamloops St., Vancouver, B. C., Canada, saves engine pictures, timetables.

W. M. REYNOLDS, Jr., 176 Gibson Ave., White Plains, N. Y., wants to collect, sell or trade all NYC divs., also roads in Westchester Co. Wants photo and data on Erie K-5s Pacific type, and any builder's photos.

S. A. RICHARDS, R.F.D. 1, Jewett, O., wants books written by A. No. 1, the famous tramp; write first.

H. A. RETTIE, 910-19th St., Watervliet, N. Y., beginner; send photo and wreck lists; foreign fans also write.

W. P. ROBINSON, 5140 Woodlawn Ave., Chicago, wants 5 copies Dec., '31, "Railroad Man's."

W. W. ROBINSON, Box 31, Batavia, N. Y., buys and trades old issues emp. tts., train orders and Books of Rules of present and aband. N. Y. short lines.

J. A. ROCHE, 416 K St. N. E., Washington, D. C., has roads around Wash., 25 for $1; will give 4 prints for 1 neg. 116 size.

R. RUGHAASE, 916 E. 28th St., Brooklyn, N. Y., has "Railroad Stories" Feb. '33 to date and current used stamps of any British colony, Canal Zone or the Philippines for sale or trade for what have you.

* * *

J. R. SCHULTZ, 1132 Willow Ave., Niagara Falls, N. Y., collects tickets, trolley transfers and unusual rail equipment.

B. SCOTT, Box 61, New Glasgow, N. S., Canada, has 10 issues "Ry. Wonders of the World" 25c. ea. postpaid; wants to get in touch with persons interested in Palestine and Egypt railways.

J. D. SEIBERT, 729 W. 34th St., Norfolk, Va., has 116 size prints Sou., RF&P, ACL, SAL, NS, M&W, Vgn., etc., 3 for 25c.; list, sample for 10c.

Capt. F. SHAW, 542 18th Ave., San Francisco, Calif., has few 116 negs. of n.g. UP (Wash.) aband. in 1934, 5c. ea. or trade for others of same line. Wants photo of 2-ft. gage Me. locos; photos and data of Bedford & Bloomfield (Ind.) and prints of LS&MS 1885-1895; write first.

C. SIMON, R. 2, Box 43, Farley, Ia., will send IC emp. mag. for each U.S. or Can. timetable as long as supply lasts; wants builders' photos of new Burlington 2-6-6-4 type and B&M 4-8-2.

H. M. SMITH, 1277 Washington St., Cape May, N. J., has 116 size CNJ, Rdg. and PRR.

D. M. STEFFEE, 317 6th Ave., Brooklyn, N. Y., has large collection of public tts. of nearly every Class 1 U.S. road, 1920 to date; send self-addressed envelope for lists. Will trade for foreign and emp. tts. or working tts. of crack flyers such as "Detroit Arrow," "Hiawatha."

J. B. STEPHANIO, 66 Greenwich St., Dorchester (Boston), Mass., starting; send lists; also wants large lithograph of "20th Century."

K. M. STOWE, 707 W. Julian St., San Jose, Calif., will send SP train orders free to anyone enclosing stamped envelope, while supply lasts.

K. C. SUHER, 4920 Elm Court, Denver, Colo., starting; will take D&RG, C&S, Santa Fe or CB&Q snaps on order.

* * *

A. G. TENNEY, 31 Knowles St., Newton Centre, Mass., has Forney's Catechism of Loco, 1882, Air Brake Catechism, Ry. & Commercial Telegraphy, and Swingle's Loco. Handbook for sale or trade for negs. Make offer.

THE FINANCIAL LIBRARY, 170 Broadway, N. Y. City, offers "R.R. Administration" by Morris and Hooper, and "R.R. Consolidation" by Grodinsky, at $1 ea.; usually $3.50 ea.

W. S. THOMAS, 184 Dyer St., Providence, R. I., wants photos of old Geneva, Ithaca & Sayre and P&NYC&RR 4-4-0 loco. No. 218, built in Sayre in 1885 (later LV 218).

R. THURSTON, 1077 Mass. Ave., Arlington, Mass., will trade prints and about 200 issues of "Railway Age."

C. UNRUH, 1313 Perkins, Lansing, Mich., will pay reasonable fee for railroad moving pictures on 8 mm. film only.

* * *

A. VAL RINTZ, 3333 N. Kedzie Ave., Chicago, has back nos. "Railroad Stories," Ry. Engineering and Maintenance, Loco. Engineers Journal, Baldwin Loco Mags. for sale; enclose return postage.

H. F. VAN HORN, Palisade, Minn., has over 130 dif. small roads, 116 size at 5c. ea.; send 10c. for sample or list. Buys or trades small roads negs.

W. A. VAUGHN, 637 S. Oak Park Ave., Oak Park, Ill., wants any CGW material; has blueprinted '34 roster of CGW locos at 30c. and pass. car diagrams and photos. 3c. stamp for list.

* * *

T. WALSH, 401 1st Ave., Verdun, Que., Canada, has p.c. builders' photos CPR 8000 to trade for one 116 neg. of modern power, esp. D&H, T&P, MeC, B&Aroos., CV 2-10-4 and others. Has other negs. and "Railroad Stories" '33 to date for same; 116 prints, 11 for 50c.

F. WARREN, Elm Rd., S. Chelmsford, Mass., has public tts. of Paris, Lyons & Med. Ry., Gt. Indian Penn. and German State RR to swap to highest bidder of heavy freight engine, esp. Mallets, and wreck photos; enclose postage.

E. WEBB, 1705 Woodlawn Ave., Logansport, Ind., has 116 size Wab., IC, PRR, etc., 4 for 25c.; dime for 2 samples and list; also 5x7 and 8x10's. Complete Monon, CPR, Erie, etc., rosters; Deforest boxing course, trade for 10 negs.; write.

L. D. WEBSTER, 18 Clayton Ave., Cortland, N. Y., buys, sells old tts., passes and train orders; trades LV emp. tt. for 1 of yours.

V. WEIGEL, 1736 W. 59th St., Los Angeles, Calif., has 3¼x4¼ prints or negs. of UP, SP, Santa Fe engines 10c. ea. Also takes on order.

C. W. WILSCAM, 725 S. West St., Galesburg, Ill., wants lists and samples of Burlington, NP, Santa Fe, GN; has "Zephyr" at World's Fair.

F. E. WHEDBEE, Seabrook, Md., has 200 dif. emp. mags.; Official Guides, Jan. and Aug. '34, 75c. ea. plus postage; many books on loco operation and signals; 6 calendar pictures for $1.

* * *

Abandonments

Baltimore & Ohio, Austin to Keating Summit, Pa., 8 miles. Rock Island, Ingersoll, Okla., to Anthony, Kan., 33 miles; Newton to Reasnor, Ia., 10 miles; and Ola to Dardanelle, Ark., 14 miles. Tuckerton, Whitings to Tuckerton, N. J., 29 miles. Brattleboro & Whitehall (CV), South Londonderry to Brattleboro, Vt., 36 miles. Northwestern Pacific, Albion to Christine, 30 miles. Niagara Gorge Railroad Corp is abandoning its line up the gorge.

Nobody Loved Him; They Called Him

Mileage Hog

By E. S. DELLINGER

Ex-Brakeman, Mo.P. and Frisco; Author of "When Destiny Calls," etc.

ZULU cars, as every railroad man knows, are those which carry the families, household goods and farm equipment of emigrants—transporting the hope of youth or the savings of a lifetime.

Rud recognized such a car on a southbound extra of the M.&M., one night, while he was backing a light Mikado down the lead. Inside the car, a span of blaze-faced Belgian horses stamped hairy feet and stared over the darkened terminal yards with its cough of engines and rattle of bumping box-cars.

When Rud coupled onto the zulu his touch scarcely swayed the big "hay-

burner" lantern suspended over its open-slatted door. Coupling made, he climbed down to check the driving gear. A young emigrant, holding the lantern chest high, was at the foot of the steps. His cold, unsmiling, blue eyes seemed to be regarding Rud with open hostility, and he asked abruptly:

"Are you the engineer?"

The voice was hard, but Rud answered cheerily: "Reckon so, buddy."

"All right," the emigrant went on, "I want to see if you can get me to Kelton without killin' the rest of my stock and breakin' up what little furniture I got left."

"I didn't know engineers killed stock and broke up furniture," said Rud.

"You don't, eh? The last one killed a colt, and smashed a brand new walnut dresser, and scattered a box of canned fruit—"

"There's slack in a freight train, mister," Rud interrupted "Not the engineer, but slack running in and out jerks cars forward and slams them back."

He turned to his oiling. The zulu man went back to his car. Although Rud did not speak to him again until they stopped at Barton, the brakeman relayed the information that he was Max Gessler, from Benkleman, Nebraska; he had bought a place near Kelton, seventy miles down the line, and he expected to go farming and get a start in life.

Rud was interested. Aware that the natives had left the flat around Kelton untouched because it was not worth clearing, he wondered if this self-reliant youth had been inveigled into buying a proposition doomed to failure.

The extra that night was hauling short loads to be switched out at stations along the line. In making up trains, short loads are usually coupled next to the engine in the order in which they are to go out. Tonight, because the train had already been made up when the zulu had come from the rip track, the yard crew had put it ahead of a car of flour for the house-track at Benton, ten miles north of Kelton. The conductor told the yard about it, let it ride, and pulled it out of town.

They arrived in Benton shortly after midnight. The crew of the local freight, which had left Beulah Bend in the afternoon, had their train on the main line, clear of the house-track switch, while they unloaded merchandise and did station switching.

Rud and his head brakeman studied the situation. They realized that in order to spot their car at the warehouse platform, it would be necessary to hold to the zulu and drop the flour car through the north house-track switch.

Now, dropping a car with a lone engine is not difficult, but with the zulu coupled on, they might injure an animal or break some furniture, because the drop requires four distinct, sudden movements of the engine.

To avoid this danger, Rud suggested to the brakeman that they have the local engine back through the house-track, couple into their car and pull it into clear. The local conductor agreed. He opened the derailing switch and told his brakeman to couple the house-track and shove back to the main.

This local brakeman was a student, a green man. He did not know exactly what to do. While Rud Randall's man was bleeding brakes off the flour car, the student released hand brakes on four cars of gasoline in the house and brought the engine against them.

Being a greenhorn, he missed his guess on where to set the knuckle. The coupling failed to make. The house-track was down grade to the north, so the cars started moving.

The student lost his head. Instead of going high to set a hand brake and stop them, he jerked the knuckle, signaled a "back up" to his engineer, and rammed the moving cars once more with his engine. By that time, the cars were moving ten miles an hour straight toward the main line with its closed switch!

RUD RANDALL was not watching the local. He was watching his own man, saw him bleed off the flour car, cut behind the zulu and signal ahead.

Unaware of trouble ahead, he moved gently up the main line to clear the house-track switch. When his drivers were going over the switch points he heard a wild yell from the student brakeman. He glimpsed a lantern flash twice in a wild "stop" sign and suddenly go out in the darkness.

Mind quickened by years of railroading, Rud knew what had happened. He was in a trap! At the rate he was then moving, the loose gasoline cars would corner the zulu and turn it over. If he stopped, they would corner tank or engine, and if one of them sprang a leak, the whole head end might go up in a flash of flame.

A second after he saw them coming down the house-track, Rud had throttle and sander open, madly yanking the zulu to safety.

It flashed by the clearance peg. The gasoline cars rolled on. Rud looked forward. Two red eyes of the local caboose were staring him in the face, a scant three car-lengths away!

He flicked the brake valve to emergency. His engine slid to a stop a bare six feet from the rear platform of the local caboose, and the local flagman came out raving:

"What in blazes you tryin' to do around here—kill somebody?"

Rud, knowing that his brakeman had opened the house-track switch and that the four cars of gasoline had rammed into the flour car on the main line with no damage but a loud noise, came sauntering out of his cab. A bleak smile on his face, he met the angry flagman and explained.

The green brakeman came running over, his lantern out, his eyes wide with terror, his knees wobbling until he could scarcely stand. He panted:

"We—we purt' nigh had a wreck!"

"Sure did," said Rud caustically.

"If I hadn't got that engine stopped—"

"If you greenhorns," interrupted the flagman, "ever had sense enough to set a knuckle—"

The flagman hushed. Through the black night, Max Gessler was coming up the cinders. He was coming fast. The smoke-dimmed rays of his lantern were shining dully on a six-pound hammer.

The railroaders watched. He stopped four feet from them. His eyes were hard. His voice was like the zip of an angry hornet.

"I'm gonna knock your brains out!"

There was something in his voice which caused the railroaders to believe he meant it. They looked blankly at each other and at him.

"You, I'm talkin' to!" He glared at Rud Randall. His hand gripped the swinging hammer. "I *told* you to handle my stuff easy, so you tried to wreck me. I'm gonna knock—"

Rud sensed the fellow had gone berserk. He kept his own head.

"Wait a minute, boy!" he soothed. "If I hadn't jerked you out of there, your car would have been turned wrongside up and gasoline poured over it. If I'd gone a few feet farther after I cleared you, we'd have rammed this caboose and killed somebody. Your stock's not hurt. You're not hurt. You better forget it."

Gessler glowered at him a moment, then lowered the brawny arm with its heavy hammer and returned to his car. Soon the train was on its way again.

In October's frosty dawn Rud spotted the car at the Kelton chutes. Usually that is the last a train crew sees of a zulu man; but when Rud came up the following night a spark of light was in the woods in the flat south of Kelton; and the next trip down a white tent was pitched in a grove near the track.

"Here's our zulu," Rud told his fireman.

"He's sure come to a helluva place to get a start in life," the fireman reckoned.

"He'll never make it." The hogger shook a sympathetic head.

"Not a chance in the world. That land's so cock-eyed poor he couldn't raise a disturbance on it."

MAX GESSLER set to work. Before autumn merged into winter, a rough board barn housed the Belgian horses and a frame house was going up near the track. All day he toiled, never pausing to watch the trains thundering by.

Often at night Rud saw the spark of Gessler's lantern flitting about the new barn, or the sky lit up from the blaze of burning brush piles, as untiring industry cleared the ground for spring planting.

The engineer wondered if a woman was coming. Sure enough, when the skunk cabbage and nesting robins heralded the approach of spring, a girl got off a passenger train at Kelton. Rud had headed in at Kelton on freight He saw the newcomer fling herself into Gessler's arms, heard him call her "Marie."

A light glistened in the cold blue eyes of the young farmer as he led her down past the engine where Rud and his fireman were leaning against the pilot bar.

The girl was lovely as a princess. Her hair was like spun gold, her eyes brown, her skin clear and smooth. Passing the railroaders, she flashed a smile and a nod, but Gessler stared straight ahead.

Rud and his fireman watched him help Marie to the spring seat of a farm wagon, drawn by the Belgians.

"She sure is a keen looker," breathed the fireman.

"Yes," agreed Rud, "but wait till she's been married a year or two, and gets fed-up with this God-forsaken place."

AT first the bride of Max Gessler came to the door when the trains thundered by. Men waved at her from cab and cupola. They always did. For a time she waved an answer, but after the first few weeks she no longer showed herself. Rud and the others wondered if a jealous husband had forbidden her this one touch with the world and civilization. They never knew.

Gessler worked that summer like a driven slave, but when he ricked his corn behind the barn at the end of the season his pile was pitifully small. Rud noticed it and said: "Wouldn't keep a cottontail rabbit."

"He'll move out before spring,"

predicted Rud's son-in-law, Joe Grigsby. "Move out and let the land go back to wilderness."

But Gessler did not move. Although the men did not know it, his every hope, his every dollar, was tied up in that farm. After corn was harvested, he cleared more land and sawed his timber into cordwood.

All winter long Rud would see him driving into town on a frame piled high with crooked sticks, or driving home through the dusk with the empty wagon, a sack of flour or a box of groceries tied to its frame.

That winter passed, and two others. In the clothes line stretched between oaken posts, Rud read the story of struggle. Fluttering squares of spotless white told when the first child came, and the second. Both were boys. Faded overalls patched over patches and threadbare gingham dresses mutely whispered that the farmer and his wife were sinking from respectability into direst poverty. Enginemen pitied the woman's helplessness and admired the man's courage.

One of the Gessler youngsters soon began to toddle down to the fence to watch the trains go by. Late in the evening Rud saw him, the chubby fists clutching barbed wires, smudged face between them peering wide-eyed at the roaring freight.

In the morning he was called to take a banana train north at 8.20. As he passed a confectionery shop his good fairy whispered:

"Buy the poor little cuss a bag of candy. You'll never miss the nickel."

Smilingly he obeyed the voice and dropped the bag into his grip.

In that day, bananas were fast stuff. The engineer who coupled into a train of them was expected to put them over the road. As Rud led twenty-two white reefers (refrigerator cars) thundering down Ozark grades, whipping through cuts in the flint hills, a feeling of uneasiness kept haunting him. Why? Certainly it was not because he was speeding, for Randall was the engineer who chose the fast ones.

The thing which kept coming up between him and the track was a chubby little face behind two barbed wires, and a young woman in a faded gingham hanging clothes on a sagging line, and a hard-faced young farmer hopelessly driving the blaze-faced Belgian horses through a stumpy field, where grasshoppers climbed wilting cornstalks and sunflowers drooped their heads in the burning sun.

Reared amidst the superstition of the Ozark hills, Rud found himself wondering if that feeling were a warning, if perhaps his throwing off stuff to the Gessler boy might entice him out through the barbed wire.

Remembering how his own little Jimmie had gone down the tracks and not come back, he had almost decided by the time he passed the clearing to let the candy stay in his grip.

IT was near noon when he emerged from the curving cut and turned down into the sag. Never had a run gone more smoothly. Rail joints were clicking merrily beneath beating drivers, exhaust was sewing its long gray ruffle on the mottled sky, dead cinders were flung backward on white reefers, and side rods were flipping up and down with flashing rhythm.

Rud was watching ahead. The clearing came out of the cut—the brown of the weathered buildings, the gray of the ashen soil and the green of the foliage. Set in the green was a gem of pink—the Gessler child clinging to the barbed wires.

Slipping quickly from his platform, Rud lifted the lid on the seatbox. He did not take out the grip nor open it. As his gauntleted right hand reached for it, there came a crash as if a meteor had struck the right side of the engine scant inches from him.

The platform went out in splinters. Steam filled the cab with a hot white fog, and air brakes went into emergency.

Spluttering, choking, he staggered into the deck. The excited fireman caught him, crying: "What's the matter? What happened?"

Rud did not answer. There was terrific bombardment as if giants flailed the cab with clubs of steel. The engine reeled and staggered. Drivers locked and skidded. It jumped and buckled, careened far right, and headed for the barbed wire fence with white reefers madly chasing it.

Many seconds later, Rud and his fireman crawled out of the wrecked engine. Except for slight cuts and bruises, they were uninjured. They nosed through the débris, where engine and eight cars had left the track, gone down the embankment, and piled across the fence.

They examined the driving gear. A side rod had broken. Its flailing end had battered to pieces the whole right side of the cab, had knocked into kindling wood the very boards on which, seconds before, the engineer had been sitting.

He looked blankly at his fireman and muttered in an awed tone: "Now, can you beat that?"

"What is it, Randall?"

"If I hadn't left my seat—"

The fireman eyed him keenly. "How come you to leave it?"

"I had a sack of candy in my grip for that Gessler kid . . ."

Rud hushed. They both stared down into the mass of broken wood and twisted steel. Both realized that, save for a baby and a bag of candy, Rud would have gone where side rods do not break nor roaring freights turn over.

When that thought went home, Rud remembered the child which had been standing by the fence . . . he could not say exactly where.

His fireman must have read his thoughts. Silently they went down the embankment, peering into the débris and staring out across the cornfield. The conductor came and his brakeman. They all took up the search, searching for a little splotch of pink, but hoping they would not find it.

So absorbed were they that they did not see Mrs. Gessler come, nor know she was there until she was a scant twenty feet away. There was a note of anxiety in the voice of the pretty young mother, whose golden hair shone in the sunlight.

"Is—is someone hurt?"

The men started guiltily, looked at each other and at her. Suddenly they burst out laughing. The little boy in pink was hiding behind his mother's faded gingham, peeping wide-eyed at the five railroaders who were prowling through the wreckage in search of his body.

Rud was the first to find his tongue. "No, ma'm!" He tried to answer calmly, soberly. "No, ma'm, nobody's hurt. Just a few cars and the engine in the ditch is all."

"I'm *so* glad!" said Mrs. Gessler. "But I'm sorry about the wreck. Can I do anything to help?"

"Thanks a lot," replied the conductor. "This is a man's job. There's nothing you can do."

Rud fished into his pocket, pulled

out a bag of mashed candy, and offered it to the youngster in pink. Young Gessler grabbed it and started to eat, even before his mother could utter a "thank you."

The vision in faded gingham watched the railroaders a minute or two—wistfully, it seemed to Rud. Then she picked up the child on her hip and went back to the house. At the doorway she paused to give a farewell wave before going indoors. The baby was still stuffing his mouth.

MAX GESSLER did not leave his half-plowed field to investigate the wreck. He stopped the team when the crash came, and watched with mild curiosity until steam had cleared and the men had begun looking over the wreckage. Then he turned his back on them and continued plowing. He did not see his wife talking with the train crew.

The conductor walked back into Sarvice to order the wrecker. Until mid-afternoon, the others remained at the scene. Hunger gnawed at their vitals, for railroad men do not live by fasting. Hunger gnawed, but on the road with a made-up train crew and an emergency caboose there is neither a bite to eat nor a stove on which to cook it.

While they waited a cloud rose out of the west. It was white at its crown and boiling like a cauldron. As it rose above the stunted oak trees, the bank beneath the white fringe showed green. Men tightened belts, frowned at the cloud, and looked anxiously at their watches. At 2.50 Rud got up and brushed the leaves from his overalls.

"You guys," he boomed, "can sit around here and starve all evening if you want to, but I'm going to hunt something to eat."

"Yeah?" scoffed the brakeman. "What yuh goin' to do? Walk back to Sarvice?"

"Nope. I'm going over to this farmhouse and ask Sister Gessler for a handout."

"Better keep away!" advised one. "The lady is okay, but that man of hers don't like railroaders a bit. You go foolin' around that place and you're likely to have a rear-end collision with a load o' buckshot."

They all laughed, but Rud climbed the barbed-wire fence and went to the house. Gessler saw him go. He stopped the team. Rud thought he was coming over, but he did not come. After a moment he continued plowing.

"Friendly cuss," Rud growled to himself. "Like the pig's left hind leg he is."

Mrs. Gessler answered his knock. She did not appear happy. Randall took off the striped cap and played with it while he talked in a soothing voice.

"I've come to see if we could get you to fix us up a bite to eat, Mrs. Gessler," he said. "We've been tied up here since before noon, and we may be here for hours."

The woman scared flies off the screen, smoothed the faded gingham, and ran a hard red hand through golden hair no longer soft and fluffy.

"Why—I—I don't know, sir." She let her eyes fall to the worn misshapen shoes. "You see, we haven't got very much."

"You've got plenty for us," the engineer assured her. "Plenty. Just a bite of bread and a few eggs and a cup of coffee. Anything to stay our stomachs until that wrecker comes."

She looked out at her husband. Gessler was still plowing. Evidently she was afraid of incurring his displeasure.

Reluctantly she consented to feed the four railroaders. A faint smile flitted across the face which still bore traces of youthful beauty.

"It won't be much," she said.

"Don't go to a lot of trouble."

Rud broke the news to the others. They laughed and joked and kidded, and pretended to worry about what friend hubby might think when he saw them all trooping in. They were still jesting when they climbed the barbed wire fence and went across the corn patch toward the house.

THE cloud climbed higher. "Goin' to rain pitchforks," breezed the brakeman.

Rud answered: "Looks to me like it's going to come one devil of a hail."

Wind stilled. Lightning streaked the face of the green cloud; and thunder raged and bellowed.

Gessler came to the end of his row. He turned the Belgians. They looked at the barn. He looked at the cloud and at four railroad men entering his house. Even then he did not quit plowing. Rud wondered if anything short of death would induce him to knock off work for a single minute. The plowman made another round.

Mrs. Gessler brought soap and towels and a battered basin. She smiled again, but even while she smiled she glanced with alarm at the rising cloud.

Before the railroad men had finished washing, the storm struck—a puff of wind—boards, leaves, tin cans scampering toward the corn field—oak trees bowing, bending, whipping up and down until their branches swept the earth.

They came inside and closed the door. Storm gods hushed, as hail was shelled from the emerald sky. Gessler came in. He did not hurry.

For thirty minutes the white icy pellets poured from the heavens. They battered the shingle roof and beat leaves from the oak trees. While the storm was at its worst Mrs. Gessler seated her guests at a table filled with hot bicuits, ham, eggs, mashed potatoes and green peas. The two baby sons glued their wide-open eyes to the window pane, watching the hail.

Throughout the meal the brakemen kept up a lively chatter. They kidded each other and the enginemen and Mrs. Gessler. None of them said much to Mr. Gessler. The latter stared gloomily out over his cornfield, where his summer's work was going into ribbons, and his shoulders drooped as with a great weariness.

Rud, having been a farmer himself, understood what a hail-storm meant to a farmer. He tried to talk, but Gessler answered in monosyllables. Rud wondered if the farmer still remembered that night when his zulu car was in the yards at Benton.

At length the hail ceased. A gentle rain fell soothingly on the shingles. The railroaders arose to leave. Gessler and his wife and children followed them to the door. Rud drew out his wallet.

"How much, Mrs. Gessler?"

"Oh, there is no charge," she answered hastily.

"Well, now," said Rud, "we aim to pay you. We wouldn't let you go to all this bother—"

"No bother, really. We were glad to have you. Any time—"

Rud could see she really meant it. There was still enough of the young girl in Marie Gessler to appreciate the company of male visitors. She had few enough callers anyway, out on that desolate farm, Rud reflected. Even the husband made a show of hospitai-

ity, but Rud fished out two dollar bills and forced them into his hand.

"We couldn't take that much," Mrs. Gessler objected. "Why, that's—"

"Fifty cents a meal," Rud quoted. "It's fair enough anywhere."

The engineer noticed a gleam of moisture in tired brown eyes as the woman said with a forced laugh: "We don't see much money here."

"We'll see even less, now that hail's ruined everything," Gessler added.

Rud stood on the doorstep, fingering his striped cap with the goggles on its crown. The farmer was watching the other railroaders go sloshing across the muddy field, appetites satisfied, bantering as they went.

"I tried farming once," volunteered Rud, as if reluctant to leave his hostess, "some years ago."

"Oh, did you?" Mrs. Gessler registered surprise. She put an arm around each of her babies.

The engineer nodded. "Yep. I couldn't make a go of it, so I went back to railroading."

"I sure envy you fellers," Gessler muttered. "Wish I had a job—"

If Rud Randall could have seen a dozen years into the future, he would have left man and wife standing in their dreary doorway, and gone back where the wrecked engine lay on its side, sending a wisp of steam whispering toward the sky.

But unseen forces which guide the minds of men in their decisions do not permit the decrees of Fate to be thus interpreted. He looked out at the wrecked engine, and back at the man and woman waiting breathlessly for him to speak.

"The M.&M. is hiring brakemen and firemen now in Beulah Bend," he said quietly.

Gessler was interested. "But a feller must have some pull, Mr. Randall—"

"No pull, Mr. Gessler. Railroads are looking for sober industrious young men. An application to the trainmaster or the master mechanic. . . ."

"Mileage Hog" Gessler

GESSLER went firing. Rud Randall taught him, taught him well. He railroaded just as he had farmed, never losing a day. Aware that engineers earned more than firemen, he bought a set of correspondence school books and went to work learning all they had to teach of locomotives.

Men did not love him. They nicknamed him "Mileage Hog" Gessler. In his presence one asked slyly: "Why do railroads keep extra boards?" and another answered: "So extra men can starve to death while the mileage hog works overtime."

Gessler ignored them and their jibes and attended strictly to business. He made good. The World War took men away, he went up for promotion, and because he had studied he was promoted ahead of older firemen who failed to pass their tests.

As an engineer he never missed a trip. Rud talked to him as one Brotherhood man to another, warned him that the wise railroader does not try to earn all the money the company makes.

"Too many hours in the cab is deadening," he said. "The fellow who lays off a trip now and then, and takes the wife to a picture show, or down

on the creek for a fishing trip, will live longer and have more friends than the one who goes every time."

Rud even predicted that unless Gessler let up he was going to overlook his hand some night, and go say "hello" to St. Peter.

Gessler did not laugh at the jest. Gessler never laughed at any jest. He shrugged, stared through cold blue eyes and reckoned: "I hired out here to work for a living, Randall, not to lay off and make friends with a lot of wisecrackers."

After that, Rud let him alone.

THE winter of 1917 was a man-killer. War had taken a third of the men of the district, and left a lot of green students—farmers, section hands, beardless boys and decrepit wrecks—in their places. To add to this difficulty, the M.&M. had bought forty new stoker engines.

The men did not like stoker engines. They did not understand them, did not want to understand them. Having grown accustomed to coupling a hundred-fifty-ton mike into thirty cars and taking it to town, they did not relish the idea of tying one of those two-hundred-fifty-ton decapods into fifty cars, and nursing it fourteen hours through the blizzard.

Often that winter the road was tied up. Crews were caught daily by the hog law halfway over the line. That suited Gessler. With the pay increases, sixteen hours every day was not too long for him.

When other men howled, officials laughed at them, called them "yella-bellied slackers," and urged them to "look at Gessler!"

If the ex-farmer knew what they were saying, he ignored official praise as he had ignored fraternal censure.

Came the spring of 1918. With soldiers, food, munitions and whole trains of export gasoline streaming eastward to seaboard, the roads were carrying a staggering load which taxed their every resource. Director General McAdoo was pushing them all he could. Few men could stand the strain. Even with the sixteen-hour law to protect them, rest periods were all too short.

Rushes did not seriously affect Rud Randall. Soldiers and their equipment were handled by freight crews, and he was now in passenger pool. Sometimes, however, there were no freight crews to do the job, so Rud was called to make an emergency run on freight, troops or equipment.

Even that did not worry him. He had been railroading a long time. Whenever he was not fit for service he stood on his rights, tied up for rest or laid off a trip. Callers and officials sometimes chided him, but Rud knew what responsibility rested on the man at the throttle. He realized it was better for a train to be late than in the ditch. That was the way the wise hoggers reasoned; but Gessler didn't. Gessler worked every day.

Pay day was the 15th of the month. Gessler, who as emergency engineer, held a turn firing for "Pap" Anderson, came north on the 14th. He was firing a big hog on a drag of empties. Twenty miles out, the stoker quit him.

Most firemen would have stopped, and demanded a helper, because the agreement on stoker engines was that when the stoker was inoperative, the company should furnish two firemen. Gessler did not do it. He bent to the task, and although they were on the road fifteen hours and twenty minutes, he brought his tonnage into Beulah Bend.

Mr. Powell, the chief dispatcher, was out when the ex-farmer came by the office.

"Sure was mighty nice of you to bring that hog in alone, Gessler," he said. "We need all the power we've got to keep traffic moving."

Gessler did not even smile.

"That's all right, Mr. Powell," he grunted. "I knew I could do it, and I didn't see any use in tyin' up the road just because a contract gave the right to."

"We'll remember you, fellow," said Mr. Powell, patting his back.

THE chief kept his word. They remembered Gessler that night. Gessler and Pap Anderson registered in at 6.10. Pap laid off because it was pay day, and because he'd had a hard trip up. The old hogger had to say he was sick and unable to go, in order to do it, but he laid off.

Gessler did not lay off, neither did he go home to bed, despite his wife's entreaty. After breakfast he cleaned up and returned to the office. He signed for his pay check and took it to the bank at 10.20. From the bank he went to the store and bought himself and his two boys new overalls. It was noon when he got to the house.

Maybe Mrs. Gessler, who had now regained her queenly smile and girlish figure, had a hunch. She rarely spoke to him about overwork, but today she urged him not to go.

"Do you realize, Max," she insisted, "that you've not missed a day in four years?"

"I'll not miss a day in the next four years, either," her husband assured her. "We've got money in the bank now, Marie. Money—do you know that? And we're gonna get lots more."

But boasting does not pay, especially around a railroad that is gripped by wartime emergency.

TROOPS were moving out of a Texas training camp that week. Before the arrival of Gessler the office had been aware that a jam was coming. Two deadhead equipment trains—empty Pullmans going for soldiers—would run south in the afternoon, and that night four troop trains would go north. By mid-afternoon the chief dispatcher had his plans made to handle the situation—if nothing happened. Then he remembered Gessler.

"We'll send him south with our first equipment train," Mr. Powell told his assistant. "He'll get into Darrel between the first troop train and the second, and be ready to double back. We'll put a passenger crew on that first troop train, put Gessler on the second, use the crew off Number Thirty-nine for the third, and borrow a South End crew for the fourth one."

Mr. Powell knew there was a bulletin in his book which read:

> **No engineer shall be eligible for use in passenger service until he shall have had at least three years successful experience in freight service.**

He was aware also that since troops had been moving, no one had ever mentioned or observed that bulletin. Maybe officials thought troops were *not passengers*. Whatever they thought, Mr. Powell, regardless of the fact that Gessler had been promoted less than six months ago, let it stand.

Rud had gone down on the night of the 14th with the Oklahoma Mail. He was called for the first troop train at 7.10. Sometimes troops were run as added sections of regularly scheduled passenger trains. Often they were run as passenger extras. Rud's order tonight read:

Eng. 1069 run pssgr extra Darrel to Beulah Bend with right over all except first class. Wait at Darrel until 7.10 p.m., Crane until 7.21 p.m. . . . Arrive Beulah Bend 11.25 p.m.

Besides the running order, Rud had another "flimsy" which read:

Pssgr Exa 1069 North hold main line, meet Pssgr Exa 1066 South at Windigo.

No. 1066 was not at Windigo when Rud arrived there. It was in the block. A minute later it came. Rud recognized Gessler at the throttle. He shouted across the deck to his fireman, Joe Grigsby:

"They're sure giving Mileage Hog the hotshots. Here he's taking this equipment train south, and I noticed they had him marked up on the board at Darrel to bring out that second troop train at 11.20.

Joe was Rud's son-in-law. In common with the other men, he disliked Gessler. He was irritated because Gessler had been run around other firemen in the tests. He resented the fact that Gessler, although a younger engineman than himself, was getting more than twice the running off the emergency board that was falling to him.

So Joe Grigsby replied: "Yeah, the lousy so and so! He's goin' to slop over some of these times."

Rud and Joe went into Beulah Bend. They were called to double back on No. 35. Rud howled about it, because No. 35 was a freight train, and asked the call boy if he had been demoted to freight service.

The old hogger did not say too much, because No. 35 was a *manifest* freight, and because he had laid over fourteen hours in Darrel. He told the caller to tell his wife in the morning why he had not come home tonight, and then he left town.

RUD knew that, according to the Darrel board, the second troop train should have left there long before he took the manifest out of Beulah. If it ran extra, his orders should contain its schedule, because it had no rights against No. 35, a regularly scheduled train.

He checked carefully for an order on the troop train but there was none. He started to mention it to the conductor. But he did not do so, because he remembered that since attempts had been made on this and other roads, to wreck troop trains, their coming had not been announced too far ahead. Expecting to receive the order farther down, unless the dispatcher ran it as a second No. 8, Rud did not mention it.

They left Beulah Bend with the manifest at 12.50. Joe talked a lot about Gessler, raving about "Mileage Hog" getting called for hotshot passenger running while he fired freight.

They went in the hole at Garver for No. 8 at 2.05 and were there seventeen minutes. Rud was expecting No. 8 to carry green signals, but No. 8 did not carry them. He frowned and shouted to Joe:

"I wonder what's happened to Gessler and his soldier train."

"I hope he fell out of the cab an' broke his damn neck!" Joe did not mean that, of course, but he said it—said it and forgot it—and they roared down the valley toward Benton.

The M.&M. had installed automatic electric block signals before the war. In the operation of this signal, a battery generates a current. This current flows through two lines of steel rails connected by contact wires soldered into them. Into the circuit is hooked a set of semaphores in such a manner that the flowing current holds them in safety position.

Any break or short in the circuit, such as is caused by a broken rail, or the presence of a car or engine with steel wheels and steel axles, will always throw *one* red board in either direction from the break, and beyond the red board another caution board. As long as signals work and men obey them, a collision is impossible.

The Brotherhoods had bargained and fought and lobbied for block protection because it would reduce the hazard of railroading. When blocks came into use, however, some of the boys swore and called them a nuisance. In a way they were, as mechanical defect sometimes broke a circuit, and under flagging rules men were forced to flag the blocks—to walk through them—when there was neither break nor obstruction.

They obeyed rules, and felt safe as long as they watched those signal arms rising before or falling behind them like hands of guardian angels.

All the way from Beulah, signals had been green. Eighteen times in as many miles out of Garver, the brakeman from the left cab window sang out, "Clear board!" and Rud echoed from the right, "Clear board!"

It was when they saw the last block signal north of Benton that the call changed to a dubious, "Forty-five!" That signal was yellow—the board at caution. The brakeman called the color. Randall echoed it, whistled his *Whaaa-wha-wha-whaaaa!* and eased off from forty miles an hour to thirty, getting his train under quick control.

He watched the signal until his pilot wheels passed it. The color did not change. As he proceeded into the block beyond, the brakeman came across the cab to ask:

"Are we meeting somebody over here?"

"Not that I know of," said Rud.

The brakeman stood at his elbow and both of them peered ahead into the night, eyes glued to the darkness where steel curved through the wooded valley.

The Red Block

BECAUSE he was working shorthanded, and because he did not wish to trust a new man in the jam which he knew was coming, Chief Dispatcher Powell himself took the Second District wire at eight o'clock, intending to work it until four.

There were twenty-seven trains in the territory when he took charge—eleven varnish, including Randall's troop train and the two deadhead equipment, and sixteen regular and extra freights. By ten o'clock he had gotten rid of three of the twenty-seven and started five others. He was preparing to move the second troop train out of Darrel as soon as it was ready.

He doubled Gessler and engine No. 1066 back on it, and put out the order:

Eng. 1066 run pssgr exa Darrel to Beulah Bend with right over all except first class. Wait at Darrel until 11.30 p.m., Crane until 11.42 p.m. (and so on over the district). Arrive Beulah Bend 3.40 a.m.

Mr. Powell gave copies of this order to nine freight trains which would be affected by the movement. He did not put out a copy of it for No. 35, because he had neither engine nor crew with which to run the manifest and did not expect to have until long after Gessler had come to Beulah Bend.

His next hour was a busy one—too

busy. He had previously cleared the second equipment train, running passenger extra, out of Benton so it could go to Kelton for No. 8 and let No. 36 come to Vance, a blind siding halfway between Kelton and Benton.

Instead of getting to Kelton, the equipment train with a young conductor stayed at Vance for No. 8. Unfortunately No. 8 had developed engine trouble down by Sarvice, fifteen miles beyond Vance.

Before Mr. Powell knew what was happening, No. 36 and a drag were in Kelton with two tracks full of cars and only one track in which to put them. The freight could not move against the passenger extra, because that train was now superior by train order. On the other hand, the passenger extra could not move against No. 8, because No. 8 was superior by timetable; and No. 8 could not move because its engine was dead.

While he was trying to get hold of the conductor on a freight taking water at Benton, to send an order to the equipment train at Vance, and at the same time fixing up No. 36 so its engine could back into Sarvice and bring No. 8 out, the roundhouse called to report an engine O. K. for No. 35.

As soon as Chief Dispatcher Powell had straightened out the tangle down the line, he came back to get orders to some of his other twenty-six charges. When he had them all on the move, he finally turned to No. 35.

Mr. Powell knew that although he had an engine, he had no crew with its rest up to take the manifest. That's when he decided to double Rud Randall and Joe Grigsby back to Darrel on No. 35. Law and contract permitted him to do it because they had been on duty less then eight hours.

So the chief dispatcher instructed yard and roundhouse, and make preparations to move the manifest and highball, bringing the crew into Darrel before the hog law caught them.

He put out a running order and five other orders for Randall. He *forgot* to give him a copy of the schedule on Gessler's troop train; and Rud left Beulah Bend unaware that the troop train was on the line!

MR. POWELL had been dispatching trains for twenty years. He had never before made a blunder. He did not come alive to this one until about the time Rud was whistling his answer to the caution board on the curve north of Benton.

The chief was eating a ham sandwich and drinking a cup of coffee. His green eye shade and the head phone were on the hook. Very calmly he laid down the sandwich and picked up the phone. He was not excited. There was no reason to be excited.

He called Benton. There was no answer. He remembered the operator had an order to deliver to Gessler. He waited forty seconds. When Benton answered, he said quietly:

"Get hold of that extra and hold him."

"Can't," came the quick reply. "Already gone. Going like hell through the north switch. . . ."

Train dispatchers used to turn white and start pulling hair or blowing out brains when things like that happened. Mr. Powell did neither. *His* railroad was equipped with electric block signals. Even if orders were mixed, *his* trains could not get together, because the blocks would stop them. True, he would probably be hunting a job tomorrow, but at least his blunder would kill no one.

Instead of calling the wrecker, he

began figuring what trains he would hold and what changes he would make in orders to keep the line open. His first move was to recall Benton.

"Let me know when you see that extra *backing in,*" he instructed.

"Backing in— What— Is that thirty-five—"

There was an almost imperceptible click in the receiver, as if someone had snipped a wire with a sharp plier. Mr. Powell waited for another sound. It did not come. He called:

"Benton! Hello, Benton!"

But Benton did not answer.

He breathed fifty times before it dawned on him that the reason Benton did not answer was that a wire was broken. He switched to another wire, and another and still another, but all were dead.

By that time, a numbness was creeping over him. Hunch was whispering that with no storm in the south, the only agency which at one stroke would clip every wire from its poles was two engines and a string of cars and coaches ripping through them. Instinct told him that, but reason kept whispering:

"It *couldn't* be. We could not have a head-on collision. Our line has electric blocks. The blocks would stop them before they got together."

GESSLER made a good run down. In Darrel he had doughnuts and a cup of black coffee. Both of them were bad for his health, but Gessler never worried over diet. While waiting for his troop train, he took his time book out of the grip and figured his mileage for the first half. It was the biggest he had ever made. His next check would be for $151.40. A gleam was in the avaricious eyes.

"Not bad!" he congratulated himself. "Long days and doubles sure bring the money."

The other fellows played pinochle at the scarred table in the lobby, played and talked and joked and laughed. Gessler did not play. He sat alone in a corner and smoked a pay day cigar.

At length he was called for 11.30. He was twelve minutes getting out. He knew that a bulletin on the engineers' board informed all and sundry that:

Trains carrying troops in transit shall not exceed a speed of thirty miles per hour.

He was aware that this bulletin was not being lived up to, for troop-train schedules were made on the basis of thirty miles an hour *average* speed. Nobody seemed to care how fast they ran so long as they stayed on the rails and right side up.

So Gessler opened the throttle. He soon made up the twelve minutes and was on time when he climbed the hill out of Windigo.

He came out on the flats between Sarvice and Kelton. It was well past midnight. Other men were sleeping soundly. Gessler should have been. A lifetime cheating Nature out of nights and the seventh day—fifteen hours doing two men's work—a pay day with no sleep—and too many miles at the throttle—all were talking. The black coffee and doughnuts didn't help very much either.

Gessler dozed a bit. He squirmed and twisted. While firing, he'd never had any trouble keeping awake, because when he was sleepy he could shake grates, or swab out the deck with the squirt hose. Now the ex-farmer could only sit and stare ahead into the night.

Half way between Sarvice and Kelton, the woods, headlight, and right-of-

way all went out. In his ears there was no roar of speeding train. Gessler snapped awake. He did not swear. Gessler never swore, because swearing wasted energy. He passed the farm where he had failed, and roared on toward Vance.

Near Vance was a deep sag. At the northern rim of the sag was an old lean-to shack in the lock of the curve. Rolling down into the sag, Gessler dozed again. This time he dozed a little longer.

While he dozed, he dreamed that he was going into the blaze of another headlight. When he opened his eyes a flash of brilliance was in them—a flash as of a headlight meeting him.

If he had been wide awake, he would have known what it was. Every engineer had seen it from that exact spot—the reflection of his own headlight from the vacant staring window of that old shack.

But Gessler was not wide awake. His hand, always lying ready on the brake valve, moved instinctively. The brakes were taking hold.

Almost instantly the mileage hog realized he had blundered. He flipped the valve over to release the air, but before the brakes were off they had cut his speed to ten miles an hour, leaving him in the hole to drag out. That blunder cost him five minutes; and when he came down the hill into Benton he was running close to fifty, making it up.

THE head block at the south switch at Benton was at caution—its light was yellow. The way the boards were hooked up on the M.&M., that caution board denoted either a red board at the north switch or a red order board. It might denote both.

Gessler was not expecting a red board at the north end, because he figured the dispatcher would not intentionally lay out a troop train for a freight. He could not see the board at the north, because it was around a curve. He did see the order board, and it was red.

The brakeman picked up a " 19 " order and handed it to him. Gessler opened his throttle and took the order. He was reading it and checking the clearance when he came in sight of the head block at the north switch.

Engs. 1069 and 1042 coupled display signals run as 1st No. 5 Beulah Bend to Darrel. Wait at Beulah Bend until 3.55, Long Track 3.40 for pssgr exa 1066 North.

The order was simple. Ordinarily one reading would have made it perfectly clear to Gessler's mind. But his mind was not quick tonight. The engineer had forced it to stay on duty too many hours. He had to read the order twice before he understood it.

While reading it the second time, he ran by the north head block and roared around the curve into the wooded valley. He did not see it, because he was reading his order. The brakeman and fireman did not see it, because they were in the deck shaking out a hard grate.

IN the cab of the manifest, Rud Randall and the brakeman watched their own headlight play through sycamores and water oaks whose leaves were almost full.

They left a short tangent, and started around a long curve—a curve which took them through more than a third of a circle, following a bend in the river. Because there had been a caution board at the northern end of this last mile, and because there should be a red one at the south, Rud was running very cautiously.

He did not know anyone was ahead of him, did not think there was; but he could not get Gessler's soldier train off his mind. When he had rounded twenty degrees of the curve, he saw a spark of light flick through the trees.

It looked like the glow of a firefly, only it was too bright and it was moving too fast. At first he did not think it was a headlight, because he decided that no engineer, especially Gessler, would run a red board. A moment later he shut off steam entirely and called Joe across the deck.

"You boys better get ready to unload!" he warned. "That looks to me a helluva lot like the headlight of a ten hundred."

He still did not believe it was, but because he always played safe, Rud set his driver brakes and waited. The brakeman went down the engine steps ready to jump. Joe Grigsby stood in the gangway watching. Then light began to play on the wall of the cut, one hundred feet ahead.

The brakeman shouted: "There she comes! Look out!"

He leaped and rolled into the weeds. He dropped his lantern, but did not hunt for it. Instead, he gave four jumps and cleared the right-of-way fence. Joe was two jumps behind him.

Rud had work to do. He hit the brake valve with one hand, the whistle cord with the other. By the time he could look again, lights in Pullman vestibules were showing. Rud recognized the troop train. Because he knew the hogger could not see his engine around the boiler head, he remained in his own cab holding down the whistle cord until the 1066 was almost upon him.

He stayed almost too long. When the troop train hit the manifest, Rud was leaving the seat of his overalls on the right-of-way fence, and his twisted body was plunging face downward into the dried leaves of the woodland.

The old engineer did not see the engines come together. He did see ten steel Pullmans running fifty miles an hour ram three wooden ones next to the engine and go through them as if they had been paper. He realized that some of the doughboys in these three cars would not live to fight "in Flanders fields."

AFTER the wreck there were rumors. There always are. Gossip whispered that Gessler was a German sympathizer and had deliberately wrecked this trainload of soldiers to help the enemy.

Chief Dispatcher Powell spiked that rumor by stating it was *his* blunder in mixing orders that had let the trains get together; and two gold stars in Powell's front room window forestalled any possible accusation that he was a wrecker.

Mr. Powell's statement explained why two trains were trying to use the same piece of single iron at the same time, but it did not explain why those trains had gotten together in signal territory. Had the block at the north end of Benton failed?

Railroad men insisted the block had worked, but Gessler had overlooked it. No one would know positively until one man of the three who had been in the cab of the 1066 made a statement. Two of the three had already gone where there are no investigations —and Gessler was still unconscious when trains started running three days later.

By that time some were saying that it might be a good thing for Gessler if he stayed unconscious. The crippled pumper at Benton told the division

superintendent he had been out the night of the wreck, and that after the doomed train had gone, he had run back into the house, had aroused his wife and cried: "Some damn fool hog-head has just run a red board!" If that were true, it might send Gessler to prison for manslaughter.

Mrs. Gessler was one of the first in Beulah Bend to hear the rumors. She was concerned. To have her husband lying at death's door was bad enough, but this new development was terrifying. Aware that Rud had stood by them in the past, and that he had influence with the officials of the railroad, she went straight to him.

"I know it isn't true, Mr. Randall," she said tearfully. "I know Max was not to blame. When he gets so he can talk, he will explain what happened. Isn't there something we can do to check that rumor?"

Rud felt sorry for the woman. He had always sympathized with her. Rud also sympathized with any man who was helpless and unable to defend himself. That evening he made a special trip down to Benton to talk to the pumper, to ask if he had made the statement.

"*Yes, sir!* I said it!" the pumper declared.

"When did you look at the block?" Rud asked quietly. "When did you see it was red—before or after the engine passed you?"

The pumper thought awhile. "It must have been after," he said. "Yes, I know it was after, because I remember seein' him in the cab window as he come toward me. Looked like he was readin' his orders."

"Do you *know* the light was red when he ran into it, or might his engine set it?"

The pumper hemmed and hawed. Finally he admitted: "Yes, I seen it just after he passed me, and it—"

"But do you *know* it?" Rud persisted. "Could you positively swear it? Remember, your testimony might send Gessler to prison for years, if he gets well."

The pumper limped around, scratched his head, looked up at the accusing signal light, and down at his feet.

"Now, I'd kinda hate to do that, Mr. Randall," he said slowly. "It's not very far from here to that block. And if he had gone into it before I saw the light— No, no, I don't think I'd be willing to swear to it."

Rud smiled grimly. "In that case, I don't believe I'd say too much about it," he advised. "Because you'd hate like the devil to be the cause of an innocent man being sent to prison."

The pumper agreed he would. The two men shook hands, and Randall went back to Beulah Bend.

THE first investigation called in Chief Dispatcher Powell. It fixed upon him responsibility for negligence in not making sure that the manifest had proper orders. The company discharged him.

The second investigation, two months later, called in Gessler, who had now recovered, to explain whether the board had been red at the north end of Benton, and if it had been, why he had not stopped.

Gessler did not lie. Asked if he saw the north block at Benton, he stated: "I do not positively remember seeing it."

"You don't, eh?" he was asked.

"No." Gessler's tone was coldly formal.

The questioner arched his brows as much as to say: "I told you so."

Rud was present as the accused man's Brotherhood representative. He inquired:

"Mr. Gessler, could you say positively that the signal of any block you entered that night was red?"

"No, sir," was the response. "No, I don't positively remember looking at any signal since I've been running an engine. I think we look at them instinctively. If they are clear, we never notice them. If they are red we do not pass them."

"Then you think, Mr. Gessler," prompted Superintendent Mark Kaplin, "you are quite sure that if this block had been against you, you would have known it and stopped?" The official liked Gessler because he was a typical "company man."

"I have no reason to think otherwise, Mr. Kaplin," Gessler answered gravely.

On the strength of his statement and statements of the men who had seen signals acting queerly, the investigation exonerated the accused man and he went on running his engine.

Gessler must have known that had it not been for Rud he would have been discharged and perhaps have gone to prison. But the mileage hog acted as if he resented it. He never mentioned the matter. Mrs. Gessler did. She went personally to thank Rud, and there was a mist in her beautiful brown eyes.

Men on the division were not exactly grateful. Some murmured, said Gessler should have been fired and put behind the bars. "It would have been a good riddance," they maintained, and asked Randall why he had interfered.

"Because it was my duty to do so," Rud answered. "I do not know that block was red. Nobody does. I do know—and so do you—that if Gessler had known it was red, he would have stopped. It is better that a man at fault should go unpunished than that an innocent should be made to suffer."

The Fight for Mileage Limitation

SOON after the war it became evident that railroading was shot. The army and navy had called whole regiments of train and engine crews to the colors. Others, trained to fill their places, had started up the ladder of seniority. When slump followed war, and veterans returned from France to claim their places, they crowded out these newer men, who were furloughed by the thousands.

That was one factor in the situation—too many railroad men. To aggravate it, railroads built bigger and better engines to haul longer and heavier trains at higher speed. At the same time the trucks, busses and private automobiles cut heavily into railroad business.

For years before the Depression, lives of railroad men rested on crumbling foundations, and after the Depression had closed other avenues of employment, the world literally fell out from under them.

Some men proposed first to Brotherhoods that the work be divided up so that all might live until times got better. Others, like Gessler, felt that their seniority entitled them to make every hour the hog law permitted. They worked day and night, and howled for crews to be pulled off when boards got slow, and piled up vast mileage while their brothers starved on the extra board.

Out of this condition grew a demand for compulsory limitation of mileage, for agreement between men and management whereby each employee would be permitted to work only a limited number of days each month.

Most of the older men opposed such limitation. They had spent years in service. Their working days were drawing rapidly to a close. Many had lost their savings in bank crash or stock depreciation.

In general, the younger men favored what the older ones opposed. Those who were neither young nor old took sides according to their own position on the seniority list.

This question of mileage limitation finally made bitter enemies of Rud Randall and Max Gessler. As Rud was one of the oldest men on the division, the grayheads naturally looked to him as grievance chairman, for leadership in opposing any limitation.

But Rud was somewhat of an idealist. He had seen what the realist never sees—that if democratic civilization is to survive, favored ones of fortune must see to it that their less fortunate brothers do not starve in enforced idleness while they themselves have plenty. Instead of fighting the limitation, Rud came out in favor of it, championing the cause of the younger men.

Gessler, who now had twenty years' seniority and figured his job was safe no matter what happened, sided with the old ones. Changing from a lone eagle-eye into a fire-eating orator, he denounced Randall as a soft-headed old fool, urged the old men to fight for their rights, and quickly became their leader.

FOR years the fight raged on lodge hall floor, on baggage truck and street corner, and finally in the White House. Eventually the young men won.

In October, 1933, a standard agreement limiting mileage was put through and signed by representatives of companies, men and Government. Under this agreement, engineers were permitted to make not in excess of thirty-eight hundred miles a month on freight, with a penalty of two days for one if they attempted to make more.

This cut Gessler's pay check. It left him sufficient to live comfortably, but that was not enough for Gessler. He refused to recognize the fact that his limitation was due to a general condition. Whether Rud Randall on the M.&M. had favored or opposed it would have made little difference. But Gessler blamed Rud and swore that if the time ever came, he would "break old Randall!"

RUD'S old eyes were not so good as they used to be. Accident had unsettled nerve centers, and sometimes he was not quite sure how signals stood.

Although he himself did not know it, local officials soon discovered that his condition was serious. They debated whether to take him off the road. He had a long record of faithful service. For years he had been their most reliable engineer.

They knew that so long as Joe Grigsby, who had married Randall's daughter, Nettie, was on the engine to help check signals, there was no danger. They exacted a promise from Joe to make every run Randall made. Aware that the moment Gessler heard the news he would force them to take Rud out of service, they mutually agreed to forget the matter and go on railroading.

It was nearly three years before Rud

knew his eyes were serious. He might have gone on down without knowing at all if it had not been for the floods in Swing River Valley.

The M.&M. had always fought water. For sixty miles from Beulah Bend to Benton the tracks followed Swing River. Each year freshets undercut banks, tore out grades, forced railroads to keep work trains always on the line, to maintain track patrols, and to hold trainloads of riprap in convenient sidings, ready to be rushed out to break in dyke or levee.

Determined to get away from this flood menace, they had bought the Cold River Loop. This loop line ran over the hills from Beulah Bend, crossed Cold River at Pitts Ford, and connected back into the main line of the M.&M. at Benton.

It was a run-down pike. They intended to rebuild it and change the main line out of the valley. Before they could do it, the Depression called for retrenchment, and they kept the pike open only as a branch carrying two trains a week.

July rains drenched Ozark hills. Water poured through wooded hollows, racing down to join the Swing. Within two days the swollen river covering four miles of tracks between Garver and Benton had put block signals out of commission, and trainmen were wading water to their thighs flagging ahead of trains.

Rud and Joe brought a train into Beulah Bend four hours late. Rud laid off. Joe went south in his turn with an extra fireman on the Oklahoma Express.

Rivers continued rising. Valleys were inundated. Hundreds were left homeless by the worst flood in thirty years. Before the night was done, the bridge over Garver's slough went out.

By noon the next day, twenty miles of track had gone into the maw of the flood-maddened Swing. Traffic was paralyzed, and dazed officials knew that it would require months to repair it so another train could move over their main line.

THEIR hopes turned now to Cold River Loop. For five years they had used it occasionally as a detour. They had not maintained it. The track was full of holes. Rails were light and rotten. Bridges would not stand the speed of heavy trains and engines.

Officials burned up telegraph wires. They determined to bring it immediately into service. They sent work trains to jack up and ballast low places, to strengthen old wooden bridges and to begin laying heavier steel so they could move their traffic until frantic management found money either to rebuild their line through the lowlands or else change permanently to this new one through the hills.

Work trains required crews. Traffic piled up in Beulah Bend. Emergency men who had not worked for years were called into service. Still there were not engineers enough, because some were driving trucks on distant highways, others were raking leaves off Uncle Sam's waste lands; and still others were a thousand miles away chopping wood or packing lettuce.

The night after the track went out a callboy got Rud on the phone.

"Want you to take out the Texas Flyer tonight, Mr. Randall," he said.

Rud's wife urged him not to go. She did not know why—just a woman's intuition—but she pleaded: "Wait till Joe comes back."

Rud had never let anyone but the caller tell him when to work. He took the call. But when he started backing

the engine down to his train the old-timer missed something—he did not know what it was.

For three years Joe had stood always at his elbow, had called signals to him. Rud had never realized it, but he had been seeing those signals through Joe's eyes. Tonight he had to squint closely to see them at all.

He pulled down toward the long track switch. Always Joe had called its color, as soon as it had come around the curve. Tonight his new fireman, Pat Dugan, did not call its color. Rud was not too sure of it until he was within a thousand feet.

He roared by the signal, by the long track switch, past the stone house out in the walnut grove where he had lived for more than thirty years. He sent out his usual three sharp raps of the whistle, signal that all was well. A moment later he saw his wife move the table lamp in answer.

FOR sixty-seven miles the loop cut through a succession of low hills and narrow valleys. It would be fast track if it were ever made into a main line. Now it was not. Rud knew it. He had once held the mixed-train run for a summer. Because he missed the thrill of high speed iron he had given it up and gone back to the main.

The road was treacherous. There were no automatic block signals to warn of break or obstruction. It made the old man a trifle nervous, because he had depended so completely on block signals.

The first open telegraph office was at Oak Grove. Rud did not see it until it was within a quarter mile. He approached under control and on the lookout. The order board was red. He shouted to Dugan:

"Get that order, will yuh, Pat!"

Pat grabbed the order, watched him while he adjusted bi-focal lenses so he could read it. It was a slow order:

Approach Cold River bridge prepared to stop, account men working.

"I thought they'd have to do a lot of work on the bridge before they run main line trains over it," he told the fireman.

"If they'd kept men working on these railroads the last five years instead of pullin' 'em all off to starve, they wouldn't have to be workin' 'em night and day when a little emergency comes up!" Pat shouted back.

A soft gentle drizzle fell on the Ozarks. Visibility was low. Rud kept wiping his front glass so he could see out through it.

He was thirty-nine minutes running the fourteen miles to Cold River, because speed restriction on passenger trains was twenty-five miles an hour. He approached cautiously, because he remembered that he would come to Cold River Bridge through a deep cut and around a sharp curve. He could not see the bridge until he was within four car-lengths of it.

Drifting down the short, winding grade, he saw a light ahead. Dugan did not mention it, neither did Rud. The old hogger thought he was close to it. He slowed to five miles an hour, and crept onward. It had been farther than he had reckoned, much farther.

Dugan watched him suspiciously from the left. The light was still. It was a yellow light, a slow light. He eased on by it, and emerged from the cut on the approach.

Cold River Bridge was a single plate girder span of steel set on concrete pillars and approached from each end by a hundred foot stretch of wooden

trestle-work built upon pilings set in the river mud.

Tonight the bridge itself stood ten feet above the flood. Water swirled around the feet of long pilings. Men were working about it, bracing those pilings so they would stand the strain of flood and traffic.

As the engineer drove across it, the bridge seemed steady—solid as any bridge on the main line—yet Rud had a feeling that it was weak.

THEY got back on the main line at Benton, shortly after midnight. Rud was glad, because he had block signals into Darrel and he could make the time. He picked up immediately to sixty miles an hour. That was Flyer schedule.

With Joe he had never felt the slightest uneasiness. Then he had seen signals clearly; Joe had called them. Ever since there had been signals Rud had insisted on his firemen and brakemen calling them to him. It had kept the men alert, and it gave a double check against the possibility of overlooking them.

Tonight signals were not clear. Thin fog was in the valley. Dugan was not calling them. Rud signed for him to come across the cab.

"Have you forgot how to railroad, Pat?" he inquired with a grim smile. "I notice you ain't checking signals."

"You can see them, can't you?"

"Sure, but—" Rud hesitated. "Sure I can see 'em."

Dugan called the next signal and the next, and many others. He kept watching Rud. He remembered that "Mileage Hog" Gessler had gotten old Bill Garner examined and pensioned on an eye test a month ago. Maybe they could get Randall out of the way on the same ground.

Some would call that a dirty way to look at things, but Rud was between him and a steady job. Regulations required perfect sight and hearing. If Randall did not have it, he should not be working. That was Dugan's angle.

He came down on the order board at Sarvice. It was green. Dugan looked at Rud peering into the night. Treacherously he sang out: "Red board!"

Rud echoed back, "Red board!" and reduced speed. Dugan chuckled to himself: "Uh, huh! I thought so!"

When they were a thousand feet from the signal, Rud kicked off his brakes and yelled: "That block's gone clear!"

The fireman waved his hand, shouted, "Clear board!" and they went by, picking up speed.

They proceeded to Darrel and back into Beulah Bend. The old hogger waited for his turn, and on the next trip he had Joe to fire for him as usual.

MEANWHILE Dugan and Gessler on a made-up crew, had deadheaded to Darrel and brought in a banana train. They were changing clothes in the crew room when Randall and Joe came in to change clothes for the outward trip.

The crew room in Beulah Bend had been equipped with a double row of steel lockers standing back to back. Gessler's was almost even with Randall's, but facing the opposite aisle.

Rud heard voices when he came in. This was not unusual. Nearly always someone was changing clothes beyond that locker, and they always gossiped while they changed. Rud did not even listen until he heard Dugan's stinging voice say:

"That old devil's blind as a bat. He can't see a light till he's right on

Treacherously He Sang Out: "Red Board!"

top of it. He can't tell green from red, nor clear from yellow. His eyes are so cockeyed near gone, he's absolutely dangerous."

"We'll look into *that*," gloated Gessler. "I'll take it up with Mr. Kaplin right away."

"Him and two more out will give you a regular turn running," said Dugan, "and give me a permanent job firing."

"Yeah, and that's not all. I've not forgot how that old softhead helped get this mileage limitation through. He's cost me a thousand dollars last year. I've got him where the skin's loose, and by golly, I aim to squeeze. I'm goin' to Mr. Kaplin soon as I get back off this trip—"

A dazed, hurt sort of look on his weathered face, Rud looked at his son-in-law. Joe began whistling.

The conversation beyond the locker ceased. Soon Gessler and Dugan came striding out. Gessler looked hard and straight ahead. Dugan did not glance at Joe or Rud. He looked down, like a dog caught killing his master's sheep.

Rud went on the trip. He knew now why Joe had rather fire his regular turn in passenger pool than to rawhide around with a little freight running. Signals grew dimmer than ever when he remembered how Joe had stood by him.

Then he thought of Gessler. He recalled how blue and discouraged Gessler had been down there on the worthless farm that day of the hailstorm. He remembered how Gessler had looked with envy after three happy railroaders going back to the wreck which might have cost them their lives. He remembered how he had spoken to the master mechanic, had taken Gessler in, had loaned him money for his first month's expenses, and had taught him how to fire an engine.

Other years of memory's scroll unrolled for him. There was the Benton wreck—the mileage hog lying unconscious in the hospital—Mrs. Gessler coming to him with the plea: "Isn't there something we can do, Mr. Randall?"

Then the trip down to Benton to see the pumper. The pumper had known what he was talking about—Gessler had run that board. Rud had been almost sure of it—almost sure, but not quite. If only he had let them fire Gessler and send him off to prison!

In Darrel next day Rud sauntered about town or sat alone in his old room up at Ma Shipton's. He had been living in that room thirty years. Maybe he would never see it again. Maybe he would never return to Darrel.

When he quite the road, he would have no business there. He would stay home with his wife, and look after the chickens, and sit out on the back porch in the twilight and watch the trains.

A Flood in the Ozarks

THAT afternoon he and Joe caught the Oklahoma Express north out of Darrel. All the way up to Benton, the old engineer saw muddy water swirling past his flashing drivers. Even the flats by Kelton, where Gessler's farm had been, where he did not remember ever having seen more than a pond or a trickle, were buried now and water stood up to the ends of the ties. He thought about Gessler, and murmured:

"If time doesn't even the score, eternity will."

They pulled into Benton at 5.40 and switched over to the detour, to the Cold River Loop.

For two hours they rolled down wooded hills into flooded valleys, or dragged over sodden grades buried deep in yellow water.

Approaching Pitts Ford, where they crossed the river, they wound for three miles down the hill overlooking the valley. Rud, seeing the flood gleaming dully from hill to hill, shook a dubious head and called to Joe:

"The M.&M. ain't going to get away from all the water in the world if they do move their tracks out of Swing River Valley."

Joe came across the deck to look out through the dismal dusk, where saw logs, trunks of trees, and piles of boards and brush rode down on its crest, and he exclaimed:

"She sure is on a rampage!"

It was dusk when they pulled into Pitts Ford. Although there were no block signals to warn him, Rud knew before he crossed the switch that the order board was red. He did not stop to think that he knew it because Joe had told him.

He kept watching for the operator to come out and hand up a "19" order. The operator did not come. He was sitting comfortably at the table when they rolled by the bay window. Joe said: "He's got a '31' for us."

Rud stopped the vestibule of the smoker even with the depot, so Conductor Jess Blanton would not have to get his uniform wet going in to sign for it. Then he himself got out and walked back to the office. The order read:

No. 8 eng. 1542 get this order meet pssgr exa 1557 South at Pitts Ford.

"What is that passenger extra?" Rud asked the operator.

"It's a lot of brass hats," came the reply. "All the brass hats on the system went north this mornin'. I reckon they're lookin' the track over to see whether they can put in a few spikes and make a railroad out of it. They're headin' back south to Darrel."

THEY all listened to the water pouring off the eaves on the board platform, to the roar of the river running out there to the east.

Jess Blanton surmised: "I'm afraid if the brass hats get a real good look at this Cold River right now, they'll go back home and let the railroad stay where it is."

The conductor went back to his smoker. Rud loafed on down to the engine. He did not go into the cab. Joe Grigsby had come out to sit on a baggage truck under the shelter of the eaves. Rud sat beside him.

Sounds were on the night, many sounds. They passed through consciousness like eddying drift in a slow current . . . the splash of falling water . . . the whine of steam and the chug of air pumps . . . and the occasional *whee-ur-uu!* as air leaked from behind a brake piston and let the shoes slacken.

These sounds were there, but the roar of the river held the center of attention. Rud could hear it, and in the intermittent blaze of lightning he could see those relentless waters piling up out next the farther hill.

They sat on the trunk fifteen minutes. Rud thought somebody ought to go open that north switch for the brass hat special. Joe thought so, too; said he'd do it when the special showed.

The river's roar grew louder. A tree out there crashed into it as the water gnawed earth away from its roots.

Joe went into his cab to see how his steam was coming. He did not return to the truck. He stayed in the cab.

Rud kept listening to the river and stroking the crystal of his big gold watch. He thought the special should have been here long ago. Maybe it had already come. Maybe it had gone into the river. That was mighty sharp curve coming down there, and the track was slick and wet, and that slow order had been taken off.

At 9.15, he called to Joe: "I'll mosey down and open that switch."

"I'll get it," Joe answered. "Come on in out of the rain."

But Rud did not come in out of the rain. Instead, he sauntered on down to the switch. He unlocked it and set it for the passing track. Then he looked up at the headlight, and down the slight grade toward the bridge. He did not look far, because the bridge was around a curve, and there were trees hiding it.

He listened, long and closely, with the rain striking his weathered face and slipping down over his jumper. There was no sound of exhaust or whistle, but there were many sounds of water, striking, swishing, roaring, as through a sluiceway.

Rud turned from the river and started back toward his engine. He took five halting steps. Something was

tugging at his heels. Something was whispering in his ear:

"Randall, you ought to go see about that bridge. Maybe there's nobody watching it! Maybe the roadmaster thinks it's safe."

HE stopped. The pull became irresistible. He retraced his steps and went down the track toward the bridge. At long intervals lightning came. In its dull glow, he could see the nearer approach of trestle work. It appeared to be standing.

When he had gone a little way farther around the curve, he could see the bulk of the steel span in the center. It appeared to be intact, but the water was flowing close to its floor.

He peered through the night. He *thought* a light was out there. Through the falling rain, his dimming eyes could not quite tell him.

He walked out over the trestle. The irresistible force kept tugging. He could feel timbers quiver. Soon he *knew* a light was there. It was not moving. He wondered why. He kept going, faster now.

He came to the farther end of the one steel span. The light was a railroad lantern, set on the steel girder. A pair of coarse heavy shoes was on the steel beside it. That was all. A light—and a pair of shoes, and a bridge shaking as with a deadly malady.

He peered toward the northern end of the trestle. Where was the owner of the light and the shoes? Why was the angry voice of the river here, different from the sullen muttering on the other side? Why? And then he knew.

Another flash of lightning played over the bridge and the water, and the northern shore a hundred feet away. He saw it first at the farther end, where the special would come down the hill and through the cut—the rails slanting crazily down and the water rushing madly at them.

Light hovered long over the scene. Rud saw every inch of that track, clear out to the cut. The farther abutment appeared to have caved in. He knew the piling was gone from under sixty feet of track, knew those anchored rails and ties were fighting the flood, striking, churning its yellow surface into froth and spray.

Rails held together by angle bars and track bolts, ties clinging to them by iron spikes, that sixty foot span was waging a losing fight. The outcome was inevitable.

The engineer realized that before many seconds had passed, this one way to the north bank of Cold River would not be there!

For many seconds after the light in the sky had died, he remained staring into darkness. His mind was racing. Somewhere to the north the special was coming. At twenty-five miles an hour it would drift down the hill, its engineer expecting to find a bridge. Four rail-lengths away, he would know there was no bridge.

Four rail-lengths was not stopping room. At twenty-five miles an hour, scarcely four seconds would elapse until his pilot wheels went into the water. He might jump, but if he did his chance would be slim, and his train would roll on in. Nothing could stop it. Rud knew. He was an engineer. In the years that had passed he had been through many perils.

He looked at the lantern and the shoes. Could their owner have left them there, and gone up the track to stop the special? He did not think so. No flagman would leave his lantern when he went flagging, not even the Negro who had been left to patrol the

bridge and keep the driftwood steered away. *No, that faithful black boy would not need his shoes again!*

Rud peered on where darkness hid the swaying bridge. It would not hang long. He might cross before the water tore it out. He might start across and go down with it. If the special should come while he was on it . . .

Cold blue silent lightning glowed in the leaden sky. He could see the bridge again. He thought he might make it across, although it jumped and rocked like a hammock.

Rud picked up the lantern, a dead man's lantern. He placed his time-book on the steel, and set a dead man's shoe to hold it down. If he did not come back, Joe would understand. Adjusting the wick, he eased off into the water, wading along the swaying bridge.

That afternoon Gessler and Dugan went to tell Superintendent Kaplin about Randall. Kaplin was not in. He was playing host to brass hats. Gessler growled, told Dugan they would have to wait another day. Dugan was almost glad of it. He sort of liked Old Man Randall.

They were called that night to take passenger extra 1567 out. They left Beulah Bend at 5.50. They had the president's private car, the general manager's private car, and the division super's private car, the chief engineer's private car, and another private car carrying representatives of a financial concern in New York.

Gessler was not nervous. He told himself proudly that when they had a special job to do, they called Gessler. He expected to go in the hole at Oak Ridge for No. 8, but when he got over there the operator winked him up the main line and handed him that order reading:

No. 8 eng. 1542 get this order meet pssgr exa 1567 South at Pitts Ford.

Having Randall and a regular passenger train laid out for him did not make Gessler feel humble. He crowed to Dugan. That started them talking about Randall, talked about him for five miles out of Oak Ridge.

He was talking about Randall when they turned a curve and went rolling into a shallow ravine. For the tenth time in two days he was saying: "When we get Randall and two more out of the way, that leaves just one man between me and a regular job running—"

He did not get it said, because the headlight had already found the top half of a black oak tree lying across the rails; and when they were a hundred feet from it, Gessler looked out.

He stopped—stopped too soon to suit Mark Kaplin and his five cars of brass hats, but not soon enough to escape the tree top. His pilot plowed into it.

There was an ear-splitting clatter, as if all the iron on the system had suddenly turned loose at one end and started rattling.

Gessler got out to look over the damage. Kaplin and the general manager and the conductor and some others came over. Kaplin asked caustically where Gessler's eyes had been, suggested it might be a good thing to have them examined.

Gessler decided he would have to take that pilot off before he could go into Darrel. Ignoring the official question, he set to work.

He worked hard. It took him an hour. He moved a little faster after it was off, trying to make time.

When he turned down the crooked hill toward Cold River Bridge, he was doing thirty instead of the twenty-five

permitted. He rolled on down the hill and toward the cut emerging on the approach to the b r i d g e. A light came out of the cut. It was a white light, but it was swinging a stop sign.

Gessler answered and set his air. He did not set it in emergency. The light kept swinging. He wondered if something could be wrong. He kicked the valve over to the big hole.

Gessler was running ten miles an hour when he passed the drenched flagman standing bareheaded by the track. He was going into the cut then. His headlight glared. He recognized Randall.

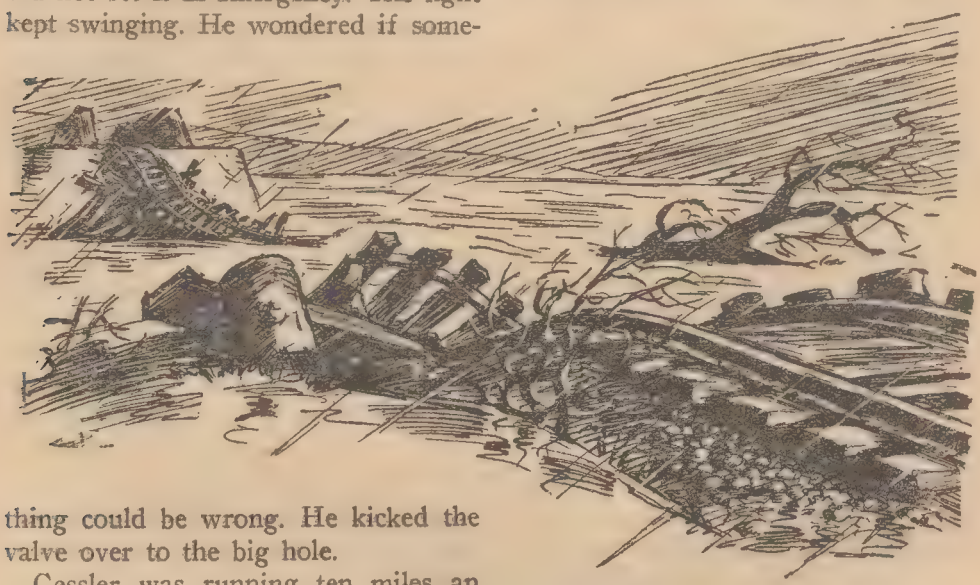
Dugan shouted: "What the hell do you suppose the old man's doin' out here flaggin' us?"

THEY did not know, then. It was not many seconds before they did. They nosed through the cut. Headlight found the swollen river, pointed dramatically at the wrecked trestle with eighty feet of rail dangling in the water.

Gessler got out of his seat. He was not running fast. His wheels were skidding.

He knew that he would stop before he rolled off the end of track. But he got out of his seat, and swallowed hard, swallowed many times.

Rud strode ahead to tell them what had happened. He did not tell them why he had come down to the river. They did not ask. They did not ask anything nor look at him.



They all three went around and stood where the pilot had been, and Rud inquired what had happened, and how. They told him *what*, but not *how*. Gessler and Dugan stared into the flood, and both of them shuddered.

Earth rocked and trembled. A heavier jar came. A tree trunk came end-on down the river. It struck the hanging track, clung for a few seconds. Bolts tore loose. The whole stretch tumbled and disappeared.

Rud studied the gold watch, and muttered: "It ain't been five minutes since I was out there on it."

Gessler said hoarsely: "I know it!"

Something in the tone made Rud look quickly up. He could not see Pat Dugan's eyes, but in Gessler's cold blue ones was a suspicious glint, and his hard face was softened with a

Rud Muttered: "It Ain't Been Five Minutes Since I Was Out in It"

smile. It was almost the first smile Rud had seen there in more than twenty years. It was a smile of understanding—the gesture of the man who has found a brother.

Gessler touched Dugan's shoulder.

"It takes mighty good eyes to see a washed-out bridge a half mile through a rainstorm," he said significantly.

"Damn good eyes!" Dugan agreed.

Rud pretended not to hear. He was staring out across the flood. They both turned to him. They were holding out wet hands with grease on them, and Gessler was asking in a reverent tone:

"Would a *man* shake hands with a *mileage hog?*"

And Rud Randall did.

THE END

ALONG THE IRON PIKE

by J. EASLEY

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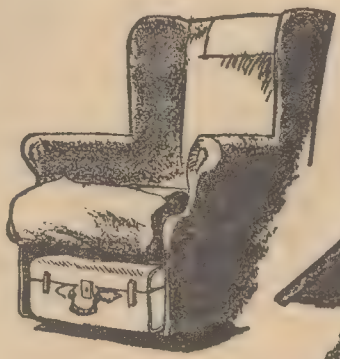
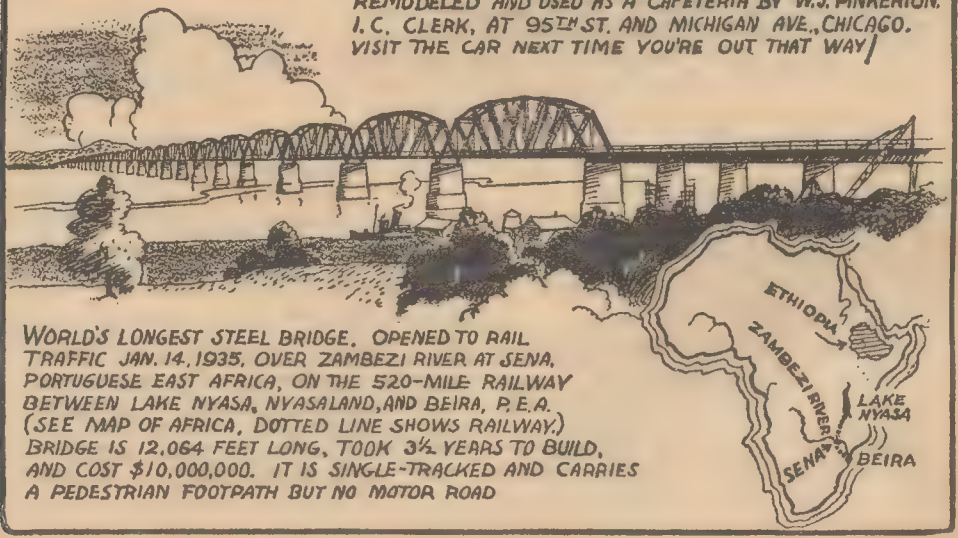


NEW TYPE PARLOR CHAIR DOES AWAY WITH BAGGAGE RACKS ON THE CANADIAN NATIONAL TRAINS BETWEEN MONTREAL AND TORONTO

ILLINOIS CENTRAL BUFFET CAR REMOVED FROM THE RAILS, REMODELED AND USED AS A CAFETERIA BY W.J. PINKERTON, I.C. CLERK, AT 95TH ST. AND MICHIGAN AVE., CHICAGO. VISIT THE CAR NEXT TIME YOU'RE OUT THAT WAY!



WORLD'S LONGEST STEEL BRIDGE. OPENED TO RAIL TRAFFIC JAN. 14, 1935, OVER ZAMBEZI RIVER AT SENA, PORTUGUESE EAST AFRICA, ON THE 520-MILE RAILWAY BETWEEN LAKE NYASA, NYASALAND, AND BEIRA, P.E.A. (SEE MAP OF AFRICA, DOTTED LINE SHOWS RAILWAY.) BRIDGE IS 12,064 FEET LONG, TOOK 3½ YEARS TO BUILD, AND COST $10,000,000. IT IS SINGLE-TRACKED AND CARRIES A PEDESTRIAN FOOTPATH BUT NO MOTOR ROAD

On the Spot

NEXT month's big feature will be a Dellinger novelette of present-day history — "The Road to Addis Ababa"—with a beautiful cover painting by Emmett Watson: "Railroading in Ethiopia." This subject is the biggest news on the globe today, and Dellinger handles it in fiction that is authentic as well as highly entertaining.

Earle Davis will present another novelette dealing with the Boomers' Fast Line.

Heading the list of fact articles for March will be an illustrated feature on "The Diamond Joe Line" (the Hot Springs, Ark., branch of the Rock Island), by W. A. Anderson, former train dispatcher on that famous old pike; and "The Last of the Jesse James Gang," an illustrated feature by E. J. Baker.

Also a trainload of other fact and fiction, with plenty of pictures, in addition to the usual 6 popular departments. Not an empty in the whole consist!

* * *

AGAIN we thank the loyal sons and daughters of the rail who support us month after month, helping to make this book what she is today. We give especial credit to those who fill out the "Reader's Choice" coupon (page 143) and send it on to us. Every vote helps to influence our General Yardmaster, who makes up the book.

The G.Y.M. is not psychic. He can't tell what you fellows like unless you send letters or coupon votes. Of course, if you don't want to clip the magazine, it's O.K. to make your own coupon in a letter or postcard. Here's how you voted for December—those of you who did vote:

1—"Southwest Passage," Dellinger
2—True Tales of the Rails
3—By the Light of the Lantern
4—"On Company Time," Earle Davis
5—"Evergreen Drag," E. P. Kid
6—On the Spot
7—"Death Valley Days," Snyder
8—International Engine Picture Club
9—"Roundhouse Foreman," Earp
10—"Wreck at Spuyten Duyvil," Edwards
11—Model Railroading
12—"Hump-Backed Hogs," Curran

* * *

"HOW did you become a locomotive engineer?" This question was put to half a dozen hoggers by James Jemail, "Inquiring Photographer" of the *Daily News*, New York's Picture Newspaper, in underground Tower A of the New York Central Railroad. The answers were:

* * *

LOUIS BIEHL (New York Central): "When I was a boy, I worked on a farm in Rockland County. I'd watch the trains go by every day, and I'd wave at the engineer. The boys got to know me, and would wave before I did. Finally I told my mother I wanted to be an engineer, not a farmer. The majestic trains fascinated me."

* * *

JAMES D. BLACK, JR. (New York, New Haven & Hartford): "I had served my time as a blacksmith when I got acquainted with a bunch of railroad men. They were swell guys and I liked them. They persuaded me to give up my trade and start railroading. I've had more responsible jobs on the road, but I like being an engineer best of all."

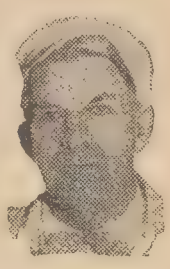
* * *

ARTHUR G. MANNING (New Haven): "I was nearly twenty-one before I had any idea of becoming a locomotive engineer. I knew a girl who nearly drove me crazy because she wouldn't go out with me. She preferred the company of the railroad men. I had to get a job on the railroad before she would make a date with me."

H. D. ARMSTRONG (New Haven): "As a boy, I wanted the thrill of riding the fast steam locomotives. The job and not the pay was my chief motive. I thought that the occupation would be the most fascinating I could find, and I wasn't disappointed."

* * *

JOHN L. BENNETT (New York Central): "Breaking my back at difficult railroad jobs on the main line. Outsiders think that railroading is all romance. There probably is a good deal of romance in a locomotive engineer's calling, but it takes many hard years of work to get there. However, the thrill of driving a steam locomotive is worth all the hard work."



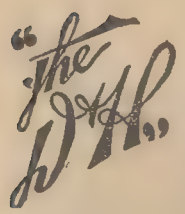
ROBERT E. REED (New Haven): "As far back as I can remember, it seems that I was always crazy for railroading. In 1892 I got a job as a brakeman. In 1897 I was promoted to fireman on a locomotive. It took six more years of firing before I was sworn in as a full-fledged locomotive engineer, and what a thrill I got!"

* * *

IT isn't often that brothers find themselves together as engineer and fireman in the cab of an engine, but it happened recently on the Chesapeake & Ohio when Engineer B. R. Lester and Fireman J. F. Lester, of the Richmond Division, were in charge of a locomotive. Generally, seniority among engine crews keeps fathers and sons and brothers apart and it was only a temporary vacancy that brought the Lesters together.

The instance might have escaped general notice except that the automatic stoker on their engine failed suddenly and the two Lesters resorted to hand firing to keep their train going—and they brought it in on time. For this they received commendation from Superintendent F. D. Glenn. —THE RAIL (C. & O. magazine).

The Information Booth



IN Dec. issue a correspondent said 6 persons had doubted his account of a runaway on the D.&H. at Albany, N. Y. They thought it must have been on West Albany hill on the N.Y.C. I, too, am puzzled. I have worked out of Albany on the D.&H., N.Y.C. and B.&A., and so acquired first-hand knowledge of local geography. The only grade in that part of the world is West Albany hill on the N.Y.C. There have been some fast rides down that hill, but no runaway ever could get into the lower level at speed and proceed to Maiden Lane, which is back of the new D.&H. bldg.—E. A. TURNIER, JR., P.O. Box 767, Hoboken, N. J.

* * *

WHO can furnish details about Sharps & Fellows Co. engine No. 9? Can anyone tell about my uncle, A. A. Anderson, boomer boiler-maker? If so, will they write to A. A. Anderson, 8116½ Hoover St., Los Angeles? Any railroaders, preferably engineers, care to write to me?—ROBERT F. WILSON, JR., 420 W. Pear St., Compton, Calif.

* * *

WILL locomotive engineers and firemen write to me? I am 17.—ROBERT MONACO (member I.E.P.C.), P.O. Box 383, Weston, Mass.

I WANT to know about an old engine on rusty rails near Clarkin, Idaho; only marks, "Cox No. 1." Also about the "Oregon Pony" in Portland, Ore.—JAMES O'DEA, 229 Columbus Ave., N. Y. City.

(EDITOR'S NOTE: *"Oregon Pony" was first locomotive in Pacific Northwest. Details and photo in our Feb., 1931, issue. Perhaps some I.E.P.C. member in Oregon will send you photo, etc.)*

* * *

A MILWAUKEE train going through Muscatine last May included 15 dead engines which looked as it they were ready for the scrap pile, and 40 coal cars. Each 2 engines were separated by 4 cars to distribute the weight.—FRANK MCBRIDE, 612 E. 4th St., Muscatine, Ia.

* * *

INFORMATION wanted about railroad graveyards, shops and roundhouses in N. Y., N. J., Pa., Del., Md., and Ohio.—H. F. GOLDSMITH, 115-38, 203rd St., St. Albans, Long Island, N. Y.

* * *

A TYPICAL railroad graveyard occupied by some 50 Pennsy and Long Island locomotives, mostly 0-6-0 and 0-8-0's, is at the Glendale freight yard of the L.I.R.R. Great hunting ground for I.E.P.C. members! No railroad dicks around. At least, there weren't any the last time I visited Glendale.—HARRY OTTENS, 10 Sheridan Ave., Brooklyn, N. Y.

Along the Baltimore & Ohio

SORRY to report the death of Patrick Flannery ("Famous Engineers," Nov., '34, issue). Pat was 91, a retired B.&O. hogger and Civil War veteran. He pulled into Life's last terminal at Grafton, W. Va., Oct. 26, 1935. His most famous run was, of course, the time he rushed the Parkersburg fire dept. to Grafton to fight a big fire there, July 5, 1888. One of his sons-in-law is H. R. Laughlin, supt. B.&O. Cumberland Div. —T. G. NICEWARNER, 15 Bailey St., Clarksburg, W. Va.

* * *

WHO can tell about the "Duquesne Limited" wreck on B.&O. near Broad Ford, Pa., years ago? —CHARLES HANDLIN, Vanderbilt, Pa.

* * *

CAPTION under old print in Dec. issue, page 133, said: "Crossing Tray Run Viaduct on the B.&O. near Cheat River, Pa." This viaduct (bridge No. 94) is really on the Cumberland-Parkersburg branch of the B.&O., 75 miles west of Cumberland, Md., and 12 miles west of the Maryland line in W. Va., in an area that was part of Virginia until 1862. The bridge consists of four 90-foot stone arches. Just east of the viaduct is the famous "Buckhorn" wall.—W. R. OSBORNE, 38 Colonial Ave., Whitehorse, Trenton, N. J.

(EDITOR'S NOTE: *Thanks for correction. There is a B.&O. station at Cheat River, Pa., but the viaduct shown in the picture crosses the river itself in W. Va.)*

* * *

TEARING along with a string of cars on the Akron-Canton branch of the B.&O., Engineer Harvey Miller made an emergency application of the air just in time to avoid colliding with a kitten enjoying a sun bath in the geographical center of the track. Seeing that she was holding up the procession, the kitten got up, rubbed against the nose of the pilot, purred, then stepped aside and signaled with a flirt of her tail for Engineer Miller to be on his way.—W. LUPHER HAY, 1803 Fulton Road, N.W., Canton, O.

* * *

GEO. CLEVELAND (Aug. Spot dept.) invited Eastern railway men to come out West where "engineers must still use their heads." There are plenty of pikes in Penna. mountains without automatic block signals or automatic train control, where 60 to 120 hopper cars of coal are dropped down the mountain.

For instance, from Claremont to Kasson Jct. is a dangerous division on the Pittsburgh, Shawmut & Northern. And on the Buffalo & Susquehanna a switchback is used to get over the mts. I was on this pike recently and it seemed to me as dangerous as any of the 35 roads I have worked on in the last 25 years. At Foxburg, Pa., the B.&O. still uses a switchback in bringing trains down from the mountain tops. Two Brooks engines, 25 years old, brought down 12 hoppers of coal. An engineer who can handle trains on these roads certainly could "hit the ball" on the wide-open spaces of the West.—J. E. BRADY, 7456 N. Clark St., Chicago.

* * *

SOMEONE asked about the loco. in front of Roland Elec. Co. on Pratt St., Baltimore. (See photo.) She was built by Gagney Bros., N. Y., for the Jamestown Exposition, 1907; later sent to River View Park (present site of R. Elec. Co.). When park closed, the company doing dismantling work saved her "for sentimental reasons."—B. H. BAAKE, JR. (Baltimore Transit Co. motorman), 10 Chenook Ave., Fullerton, Md.

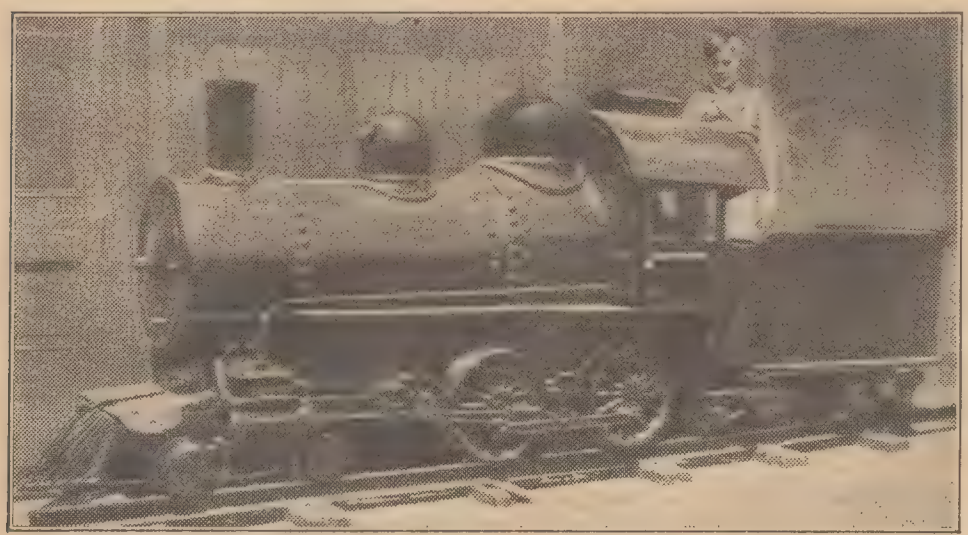


Photo by B. H. Baake, Jr.

This Iron Colt Pulled Amusement Trains at the Jamestown Exposition in 1907

The Reader's Viewpoint

IN two novelettes Earle Davis gave the impression that railroad companies with bonded indebtedness and large capital were all wrong, and the "Boomers' Fast Line" set-up was the ideal. However, Davis overlooked the fact that even the B.F.L. originally had to acquire the necessary land for its right-of-way; and that, along with all the other expenses involved in building even a small railroad, costs plenty of money, and that money can be raised only by either stock sale or by borrowing on mortgage, represented by bonds. Davis glosses over the fact that those boomers virtually had the road handed to them on a silver platter.

Maybe the Boomers' Fast Line didn't have to support the entire school system the way the railroads operating in New Jersey do. In our little town, with about 2 miles of railroad within its borders, the school board receives upwards of $10,000 per year from the state railroad tax, but not a cent from busses or trucks which burn up our good roads and crack the plaster on our houses as they rumble past.

Thank you for printing my request in the International Engine Picture Club for L.V. engines and "Black Diamond" pictures. I got splendid results. Now I wonder if any fans will send me photos of past or present freight and passenger L.V. stations, as well as scenes along its right-of-way.—GEORGE B. WHITEFIELD, vice president and cashier, First Nat. Bank, Eatontown, N. J.

* * *

JOHNNY THOMPSON has a clever line of chatter in his Engine Picture Kid stories, but the plot of "Evergreen Drag" wasn't as good as its comedy. N.P. trainmen get a big kick out of E. P. Kid stories. Keep 'em up!—"CUPID" CHILDS (N.P. conductor, author of "Free Gasoline," etc.), Mandan, N. D.

* * *

I AM one of the many satisfied readers of RAILROAD STORIES. I happened to get the first comeback in Dec., 1929, and haven't missed a copy since. For 7 months in 1933 I couldn't read, being in a railroad hospital, blind in both eyes. After 5 operations one eye was saved. On returning home I wrote for the back numbers and got all but one. Eventually I obtained that one by advertising for it. Money couldn't buy my complete file of magazines.

I was a gandy dancer on the C.&O.; there is romance in even that branch of railroading. Dellinger is your star author and the Engine Picture Kid is a good second for those with a sense of humor. Rails, please write.—JAMES L. BOONE, Caldwell, W. Va.

* * *

DEC. almanac said the last spike was driven on the Northern Pacific at its Seattle terminus Dec. 16, 1873. It should have been Tacoma, not Seattle. Tacoma was the original terminus. The line to Seattle, built in 1883, was considered a branch for many years. Smalley's history of the N.P. says the line was completed 24 hours before the time limit set by Congress; that is, the end of 1873.—JOHN MICKELSEN, 1136 Pacific St., St. Paul, Minn.

* * *

MANY of our guests enjoy reading RAILROAD STORIES.—W. M. HAMILTON, Supt., Order of Railway Conductors Home Ass'n, Savannah, Ga.

* * *

ANSWERING Hal Kaiser's query (Dec. issue): He may find an article on locomotive whistles in Dec. *Popular Mechanics.*

I ask for a vote on subjects for covers for RAILROAD STORIES. Personally I think they should be actual railroading.—FORREST KEENAN (Milwaukee Road), Perry, Ia.

(EDITOR'S NOTE: *What do you mean by "actual railroading," Mr. Keenan? Your letter was written before our Jan. issue came out, so you weren't referring to that Christmas tree scene. What do you think of historical pictures such as famous wrecks, the strike of 1877, etc.? How about our subject for next month—"Railroading in Ethiopia"? Readers, tell us which covers you've liked best in recent years and which ones you didn't like.)*

* * *

DELLINGER got his signals mixed when he had Harvey Wasson in "Southwest Passage" marry the girl. What kind of a he-man would marry a gal who acted like *Virginia?* Maybe it's love!—RAYMOND SEREIKAS, 3243 S. Emerald Ave., Chicago.

* * *

AS a lover of the iron trail and a painter of railroad scenes, I urge you to sidetrack wild fiction. Your best bets are feature articles, accounts of abandoned roads, last runs and news of foreign pikes. We are familiar with U. S. roads; tell us about those in other countries.—G. FRANCIS MEREDITH, 15 Mt. Vernon Rd., Northfield, N. J.

* * *

LAST Sept. I went to Two Harbors, Minn., to make a photo of Duluth & Iron Range engine No. 3, an old wood-burner built by Burnham, Parry, Williams & Co. (now Baldwin). She was towed to Two Harbors on a scow in July, 1883, for construction work on the 68-mile line to the mines at Tower. Tom Owens was engineer on this locomotive pulling the first trainload of iron ore shipped in Minnesota. He is now retired vice president of the D.&I.R.Ry. After 40 years of service No. 3 was about to be scrapped in 1923, but a group of employees bought her. Now she stands near the general office bldg. at Two Harbors, a cherished memorial.—JOHN T. GRANFORS, 209 39th Ave., E., Superior, Wis.

* * *

UNLESS cash is forthcoming soon, the N.Y. & Penna. R.R. is doomed. Floods last July washed out much of the roadbed and many bridges along its 60-mile length. The road winds from Canisteo, N. Y., through beautiful country to Shingle House, Pa. It serves its farmer-stock-

holders and small industries. It has 2 locomotives and a few freight cars. There has been no passenger service for a long time. After the R.F.C. refused a loan, Gen. Mgr. Guy M. Beasor tried to raise funds to rebuild the washout. Commercial trucks can't seem to fill the bill.—JAMES L. SIMS, Great Bend, Pa.

(EDITOR'S NOTE. *Here's a chance for the Boomer Ass'n to refinance a perfectly good pike.)*

* * *

WHILE working as assistant director at the Paramount Studio on a picture called "Desire," with Marlene Dietrich and Gary Cooper, I discovered that 2 of my fellow-workers were also sons of Erie railroaders. Robert Aylsworth, electrician, was the son of a hogger. Cameraman Robert Pittack's father worked in Erie shops at Scranton, Pa. And my father, Samuel Lissner, started in with the Erie when he was 16 and worked on that road for 39 years. Quite a coincidence for us 3 sons of Erie—all strangers—to meet on the same picture!—RAY LISSNER, 6234 De Longpre Ave., Hollywood, Calif.

* * *

IN Dec. issue Robert Donat, hero of the motion picture, "39 Steps," was alleged to have ridden from London to Scotland on the "Royal Scot." What he took was the "Flying Scotsman," instead.—JACK GROSS, 7321 67th St., Middle Village, Long Island, N. Y.

* * *

FANS who would like to know how railroads looked in President Buchanan's administration should see the motion picture, "Diamond Jim."

* * *

IN Dec issue Geo. B. French, of Trumbull, Conn., asked if the locomotive shown in "Anna Karenina" was the 1079, S.P. engine rebuilt for Russian movie scenes. She was. At the roundhouse today I saw the 1079 being dressed up for another film, name unknown to me. Her tank bore the lettering "Brooks R.R." and under the cab was a large number "1." Tell the boys to keep an eye out for her. In her picture she will wear a good old-fashioned pilot.

After 5 years on furlough from San Joaquin Division of the S.P., I have been called back to work; not just a seasonal splurge, but old-time business!—K. P. BAYNE, 1660 Shatto St., Los Angeles.

* * *

THAT was a good idea of Frank Donovan's about publishing a catalog of railroad fiction, but why doesn't he send in his list for publication? I have one book, "Snow on the Headlight," by Cy Warman, about the Burlington strike.—PAUL CRUIKSHANK, 909 W. Clark St., Champaign, Ill.

* * *

RAILROAD fans around Tidewater, Va., who would like to form a railroad club are invited to get in touch with me.

Who has data on the Surrey, Sussex & Southampton R.R.? What power was used by the Camp Lumber Co. around 1890 on its lines in Southampton County, Va.? A branch ran from Cortland south across my grandfather's farm near Newsoms. After the timber had been cut the track was taken up, but the grade is still plain. —RICHARD E. PRINCE, JR., 1141 Larchmont Crest, Norfolk, Va.

GREETINGS from the geographical center of North America! The exact site is marked by a stone monument surmounted by Old Glory. I was agent at the G.N. station here for 13 years, and was in the G.N. agency and accounting dept. 28 years, retiring on pension Feb. 28, 1930. Although I am only 66 the train crews call me "Dad," probably because I never reported one of them, but when any of the boys made an error I talked to him like a father. The present station agent here is Geo. Lempke, a mighty fine fellow and a good railroader.—GEO. W. WILSON, Rugby, N. D.

(EDITOR'S NOTE: *We are indebted to "Dad" Wilson for picture of Rugby station, page 128.)*

* * *

HERE is a train order on the Great Northern Ry. that is unusual, thank Heaven:

> Form 19. Train Order No. 108. Oct. 31, 1935. Whitefish. C. & E. eastward trains. Account earthquake shock at 11.40 a.m. run carefully where rocks liable to fall. Also examine bridges and tunnels. J. E. M., Supt.

Section crews patrolled track ahead of trains. Temblors along the G.N. were mild; but at Helena they were bad, while the last ones were disastrous.—H. E. WEBSTER (G.N. engineer, author of "Running the Gauntlet," Jan. issue), N. 5017, Spokane, Wash.

* * *

ON Sept. 12, 1935, a local passenger train on the Milwaukee Road from Sioux City, Ia., pulled into the passing track at Canton, S. D., and went right on through an open switch into the roundhouse at 15 m.p.h., smashing into some cars loaded with ties and on through the door. Nobody hurt.—HOWARD BLACKBURN, Canton, S. D.

* * *

THE 4TH MARINES, stationed here, are grateful for copies of RAILROAD STORIES recently received. Any further gifts of railroad publications likewise would be appreciated.—REV. M. M. WITHERSPOON, Regimental Chaplain, 4th Marines, U. S. N., 527 Haiphong Road, Shanghai, China, *via* Postmaster, Seattle, Wash.

* * *

AT 40 m.p.h. the crack S.P. "Lark" struck a heavily laden truck at 8.30 A.M., Oct. 19, 1935. The truck and 2 locomotives, one of which turned over on its side, and a coach were demolished. Enginemen and truck driver escaped injury. The second engine took the train to Santa Barbara, where a helper was coupled on to get over Conejos grade. The accident occurred at Glendale, Calif., home town of Chas. W. Tyler, the author.—WALTER F. PITTMAN (age 13), 3161 Walnut St., Huntington Park, Calif.

Photo by W. Scott Thomas

This Combination Car at Taftsville, Vt., Is a Relic of the Abandoned Woodstock R.R.

Railroading in Old New England

"HUMP-BACKED HOGS," by Arthur Curran (Dec. issue), did not go back far enough when it said the Central New England was an exception in being a Connecticut road that did not have Rogers engines.

This road was opened in 1871 as the Connecticut Western. Between 1871 and 1875 they bought 11 engines, all from Rogers; so their roster during that time was composed of Rogers engines. The road became the Hartford & Connecticut Western in 1882. They bought 5 more Rogers engines, and in 1889 disposed of one and got 4 Danforths when they took over the Rhinebeck & Connecticut—Rogers still predominating.

No Rogers engines were bought thereafter until 1899, during which time the road was the Central New England and the New England Division of the Philadelphia & Reading and the Philadelphia, Reading & New England. In 1907 they acquired 2 more Rogers (4-4-0's). When the Central New England, organized in 1907, acquired the Poughkeepsie & Eastern it acquired 16 Rogers engines (2-8-0's). The first train across Poughkeepsie Bridge, Dec. 29, 1888, was pulled by a Rogers.—T. B. ANNIN, secretary, N. Y. Chapter, Ry. & Loco. Historical Society, 13 May Terrace, Maplewood, N. J.

* * *

WARE RIVER branch of the Boston & Albany is being torn up. Cenedellia Construction Co. is building a large dam on Ware River between N. Dana and Enfield, Mass. Moving construction machinery—some of it too big for railroad clearance limits—was quite a job.—L. L. GUILD, Supt. Transportation, Cenedellia Construction Co., 167 Main St., Milford, Mass.

* * *

NEAR Marlboro, N. H., I came upon an old single-track railroad grade with a crossing sign. In the woods nearby was a water tank. Who can tell me about this forgotten streak o' rust?—ALBERT HASSETT, JR., 711 E. 237th St., N. Y. City.

ON a recent trip in Vermont I saw Montpelier & Wells River engine No. 13 (pictured in a recent issue). She stands, partly dismantled, in Montpelier roundhouse. Later I took snapshots of Nos. 19 and 20, also St. Johnsbury & L. C. switch engine No. 24, all 3 ex-B.&M. engines.

Right beside a new cement highway I saw an old combination car, still on her trucks, that once trundled over the Woodstock R.R. This road was described and pictured in an article, "The Woodstock's Last Run," by Freeman H. Hubbard, now editor of RAILROAD STORIES (July, '33, issue). The car inspired me to write the following lines:

ABANDONED

Up in Vermont, where mountains are green
And history goes back afar,
Beside a road may plainly be seen
A little old railroad car.
Silent she stands, deserted, alone;
Sad and dreary her plight;
Out are the lamps that once gaily shone
On trav'lers riding at night.
Railroad abandoned, coach is no more;
Road hogs now pass her by;
But deep in the hearts of friends of yore
The Woodstock will never die.

—W. SCOTT THOMAS, 184 Dyer St., Providence, Rhode Island.

* * *

I LIKED Dellinger's "Southwest Passage" (Dec. issue) very much. I wish he would stick to such plausible yarns instead of "blood and thunder" stuff which some readers seem to prefer.

The articles about old-time wrecks also are good. Keep them coming. I'd like to see more stuff like "The Ocean Shore Comes Back" (Dec. issue), but business doesn't give much chance for that sort of thing. I liked "On Company Time" (Dec. issue); Earle Davis has a lovely way of making officials appear dumb.—LINWOOD W. MOODY (rail photographer), P. O. Box 144, Union, Me.

(EDITOR'S NOTE: *Just as we go to press, we learn that Mr. Moody is seriously ill and will not be able to answer requests for engine photos, etc., until he recovers—which we all hope will be very soon!)*

The British Empire Heard From

EIGHTEEN months ago I saw my first copy of RAILROAD STORIES in a second-hand book store at Hove, Sussex. I read it from cover to cover twice, and have bought every copy since. A friend kept borrowing my copies and returning them so tattered that I finally gave him a subscription to the magazine, so he gets his own now.

A parson with whom I was staying—a learned man, scholar and theologian—picked up a copy of RAILROAD STORIES and started to read. He wasn't happy until he had finished the 4 copies I had with me. He said he didn't understand the railroad slang, but found the stories refreshing after much theology.

On another occasion 2 or 3 copies were missing from my pile, and I discovered my landlord reading them. A few weeks ago I traveled to Newcastle for the inaugural run of the "Silver Jubilee" train. I got to talking to a fellow passenger, who turned out to be an Australian railway enthusiast, a reader of RAILROAD STORIES.

Your magazine costs me about $3.50 a year. —JOHN B. FIRTH, Jesus College, Cambridge, England.

(EDITOR'S NOTE: *Foreign subscription to Railroad Stories costs only $3 a year if you write direct to the publisher. Mr. Firth, your Australian fellow passenger must have been M. A. Park. See Jan. issue, page 136.)*

* * *

GEO. TILLOTSON of the Puget Sound Transportation Library, Lynden, Wash., sent me this list of Canadian timetables now using the 24-hour system: Pac. Great Eastern, Can. Pac. (Manitoba and B.C.), Can. Nat. (Man., Hudson Bay Ry., and B.C.). —CHAS. CORWIN (author of "On Time," July, '35, issue), Rowayton, Conn.

* * *

REGARDING the argument about 24-hour system on C.P.R.: Timetables issued to the public show train time in conventional form: *i.e.*, light figures for A.M., dark figures for P.M. But in working timecards and for timing messages, the 24-hour system is used between Fort William and the Pacific Coast.—V. WAGNER, Wire Chief, C.P.R. Communications, 26 Inglewood Drive, Toronto 5, Ontario, Canada.

YOUR almanac (Dec. 18) said the Dominion Atlantic Ry. was part of the Canadian National System, whereas it is part of the C.P.R.—A. G. SIMMONS, 92 James St., Ottawa, Canada.

* * *

DURING the last 2 years I have had the pleasure of reading RAILROAD STORIES. Between its covers I find many interesting articles and illustrations.—LESLIE G. POOLE, 20 Oak Grove, East Malvern, S.E. 5, Melbourne, Australia.

* * *

NORTH AMERICAN railroads appeal to me, especially the S.P. and G.N. Your best feature is the locomotive roster each month. Your fiction is pastime for a quiet evening. Keep E. S. Dellinger going with his Rud Randall and Brick Donley yarns. I wish someone interested in British railways would write to me. Midland Div. of L.M.S. runs through my home town.—ROBERT C. LINGWOOD, 15 Skilbeck St., Leeds 12, England.

* * *

COL. MOUNT, British Govt. investigation officer for railway accidents, praised the American pattern of automatic coupler in his official report on the L.N.E.R. wreck, night of June 15, 1935. An express from London ran into the rear end of another express which had been held by signals at Welwyn station, 24 miles north of London, killing 7 persons.

Col. Mount said, with regard to the behavior of rolling-stock during the wreck, that the outstanding feature was the service rendered by the buckeye-pattern coupling, in conjunction with Pullman type vestibules, in preventing telescoping of cars. Otherwise, he pointed out, the death roll would have been much heavier.

Since 1896 all new main-line equipment put into service by the Great Northern Ry. (now L.N.E.R.) for its own use—and also for jointly-operated East Coast Route services to Scotland—has been buckeye and Pullman vestibule equipment. The L.N.E.R. has carried on that policy since 1923.

The English G.W.R. also uses automatic couplers on its latest train units, while the L.M.S. has heavy electric stock so equipped, which was built for the old Lancashire & Yorkshire Ry.—F. H., Liverpool, England.

Engine-Cab Heroism

SPEAKING of railroad heroes: I was engineer on Burlington train No. 190 between Davenport, Ia., and Galesburg, Ill., 13 years ago. Once I saw something on the track half a mile ahead which I thought was a dog. Buster Burkhalter, the fireman, exclaimed: "My God! It's a child!" and he darted through the cab window.

I big-holed her and hurried ahead on my own side. Buster, standing on the pilot step, leaned over and snatched the little girl aside. At the same time he jumped to prevent the cylinder cocks from catching in her clothes. The engine stopped a length farther on. As Buster picked up the girl, 3 yrs. old, her mother came running up. She had headed for a store and the child had followed her onto the track.—C. H. WHITE, 69 S. Broad St., Galesburg, Ill.

A Section for Juice Fans

BROOKLYN R. R. CLUB announces a contest for letters of not more than 500 words each on the subject: "Electricity *vs.* Steam for Railroad Operation," especially as applied to Pennsylvania R.R. What do you think of P.R.R. electrification? Do you regard it as an improvement over steam, cleaner and more efficient? Or did you prefer the Pennsy *before* it was electrified? In either case, give your reasons.

Judges appointed by the Brooklyn R.R. Club will select what they consider the 3 best letters. The club will give each of the 3 winners a round trip between Penn Station, N. Y. City, and Philadelphia, Pa. In addition, the Pennsy has assured us that each of the 3 will receive a free pass to ride in the cab of a new streamlined 4-6-6-4 Pennsy GG-1 electric locomotive, on the entire round trip! The trip may be taken any Sunday this spring, at the convenience of each winner.

Ordinarily, an engine-cab pass on the Pennsy is as hard to get as a Congressional Medal.

Letters will be judged, not for technical details or neatness of script, but for the clarity and reasonableness of arguments. In other words, "plain horse sense." Each contestant must agree to abide by the judges' decision. Everybody is eligible.

No coupon to clip, no entry fee, no red tape, no technical knowledge required. However, neither the Brooklyn Club nor the P.R.R. will bring contest winners to N.Y. or Phila. If you reside in some other locality and if you win one of the 3 awards, you cannot use the round-trip ticket or locomotive pass *unless* you come to N. Y. or Phila. personally at your own expense. All entries must be received at Brooklyn R.R. Club headquarters on or before midnight of Feb. 29, 1936. Do not send entries to RAILROAD STORIES.

This seems to cover every essential point. If not, ask us what you want to know. Be sure to enclose a self-addressed stamped envelope. Or visit the club any Sat. afternoon or evening. Everybody welcome. Recent visitors included a delegation from the N. Y. Chapter of R.R. Enthusiasts, Inc., headed by Director A. P. Formanek and his wife, who inspected our miniature pike, the Dunwood Western Lines.—BROOKLYN R.R. CLUB, H. W. SALER, president and gen. mgr., 338 74th St., Brooklyn, N. Y. *(Phone: SHore Road 5-0242)*

* * *

NEWARK, N. J., now uses 3½ miles of the old Norris Canal bed for a street car subway, leased to the Public Service Corp. of N. J., which saves 15 mins. on the run to Belleville as compared with the former surface route.—RUSSELL STOKES, Sewell, N. J.

* * *

ANSWERING the recent query of J. E. Schwartz, Ogden, Utah: There is a standard-gage railroad at Mare Island Navy Yard, Calif. Including sidings, it has 20 miles of track and 2 locomotives, both 0-2-2-0, and a gas-electric 0-4-4-0; also 2 tank cars to supply fuel oil and water to the 9 locomotive cranes, some box and flat cars, and 4 or 5 air-dump cars for rubbish.

In 1929 I was firing a D.&R.G.W. engine driven by the father of G. A. Lathrop, writer of railroad yarns. I was a brakeman on the Salt Lake Division until the justly celebrated Depression enabled me, along with thousands of others, to take a long, long rest. Instead of resting I joined the Navy.—HENRY HARDENBROOK, U.S.N. Hospital, Canacao, Philippine Islands.

* * *

THE Diesel just couldn't take it! This is what happened: The Santa's new, giant, 3600-horsepower, 240-ton Diesel locomotive, No. 1 (photo in Dec., '35, issue) hauling "The Chief" in a westbound test run, made the 1,339 miles from Chicago to Albuquerque, N. M. (Dellinger's home town), in 20 hours and 22 minutes. This set a new speed record. The Santa Fe's regular schedule requires more than 29 hours between those 2 points.

"The Chief" was making a test run to Los Angeles. Six miles west of Gallup, N. M., on the evening of Nov. 20, the Diesel motor burst into flames. The first section of the locomotive was destroyed, slightly injuring 2 men, but the train was backed into Gallup on its own power. We congratulate the Santa Fe on its magnificent run from Chicago to Albuquerque, even though the trip was ended abruptly by an unavoidable mishap.—EDITOR.

* * *

BEFORE the automobiles, the Elgin, Belvidere & Rockford Ry. (an electric line, abandoned in 1929) did a land-office business over week ends. My father tells me that one warm Sunday when I was only a baby my parents decided to go picnicking along the Kishwaukee at Cherry Valley, Ill. As usual, the open car was overcrowded. Dad, holding me in his arms, got the last position in the doorway. The heat was too much for the man next to us and he fainted, nearly throwing us out of the car. Somehow Dad supported this dead weight until the car stopped. The man was quickly revived and we were on our way again.

Now the line is deserted, ties are overgrown with weeds. It used to run from Elgin to Rockford, Ill., connecting at Elgin with the Chicago, Aurora & Elgin, to form "Chicago-Elgin-Belvidere-Rockford" route. Part of the system was the Rockford & Freeport, which was shorter than the E.B.&R. division. The third section of the system was the Rockford, Beloit & Janesville, running from Rockford to Janesville, Wis., as long as the R.&F.

The entire system was known as the Rockford & Interurban Ry. Co. Overhead catenary power transmission was used. Cars looked like old-style interurbans but were neither cumbersome nor slow. In fact, in the '90's one of the old cars beat a C.&N.W. train from Winnebago to Pecatonica, Ill. But in the pike's last years, with the roadbed badly neglected due to financial stringen-

Photos by Roy L. Peterson

(Top) C. & N. W. Bridge near Belvidere, Ill., Passing Over the Abandoned E. B. & R. Roadbed. (Middle) E. B. & R. Car No. 105 Rotting Away on a Scrap Track at Marengo, Ill. (Bottom) Old E. B. & R. Siding Midway Between Rockford and Cherry Valley, Ill.

cies, cars were never run to full speed. The later cars were given Indian names, as Peconotonca, Hononegha, Kishwaukee, Sinnissippi, and Black Hawk; painted maroon and cream. Now they're painted orange and yellow and belong to the Rockford traction system.

Dismantling of the E.B.&R. was begun at Cherry Valley in Aug., '32. The R.&F. was junked in '33. I don't know exactly when the R.B.&J. was torn up, but a concrete highway now goes on part of the old right-of-way.—Roy L. Peterson, R.R. 3, Belvidere, Ill.

Warren Crater, Furloughed C. N. J. Fireman, at the Control Board of the Union Connecting Railroad, Owned and Operated by the N. Y. Society of Model Engineers. This Society Will Hold Its Annual Exhibiton Feb. 7th to 22nd. (See Page 143)

Model Railroading

Conducted by Charles G. Cunningham

Photo by American Power Tool Corp., N. Y. City

Main Frame of Engine Set Up for Drilling (See Next Page)

How to Build a 4-6-0 Scale Locomotive

MANY readers have asked us how to build a simple loco. which would take the curves on the average model system, so we are presenting a 4-6-0 type, the N. Y. Central class F-12. That is to say, the engine described here was patterned after the F-12, with a few minor changes—such as removing the taper from the boiler—to make her simple, cheap, and easy to build.

This is the first of a series of articles which, when complete, will give you full instructions for building the 4-6-0. These instructions could be adapted to the construction of any type loco. you desire. Each month a different unit of construction will be described. Since the construction of the main frame for all engine models is about the same, you may, by following the general ideas set forth, build a frame for a 2-10-2 or an 0-4-0. If you care to follow the dimensions given here in the drawings, the final result will be a 4-6-0 type.

In changing to scale models you would need a few more tools. Some of these we will tell you how to make at low cost. Some parts, such as the driving wheels and axles, you may buy machined. You will find it more instructive, more fun, and cheaper if you invest in a good lathe. Lathes which will give you accuracy to the one-thousandth of an inch may be bought for as low as $14.95.

In laying out the main frames, the first consideration is the wheel centers. We will describe the procedure for O gage and, except where noted, the same system holds for OO and HO gages. Get a piece of standard, brass channel 1″ wide by ½″ and 10″. Square off each end, making the piece 9⅜″ long. If you cannot buy your

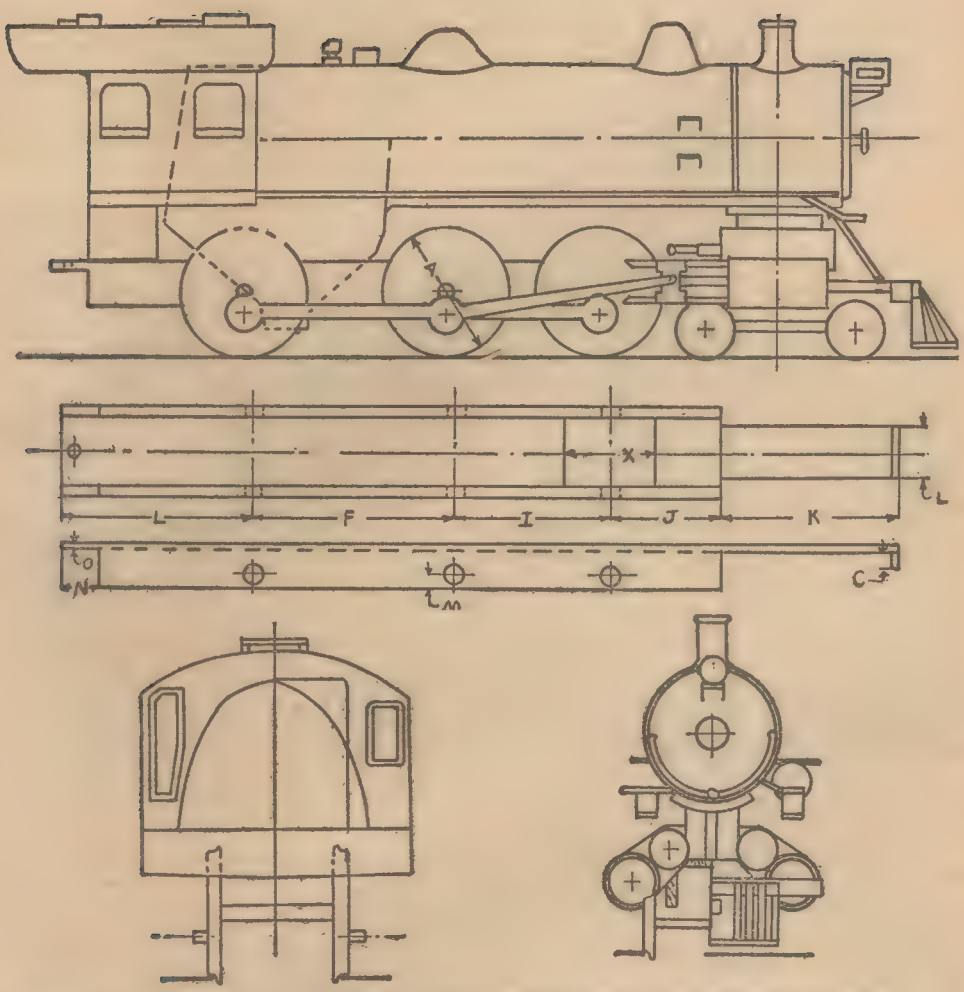


Diagram of 4-6-0 Type: Side Elevation, Bottom of Main Frame, Front and Back Views

channel in your local hardware store, try one of the big supply houses.

Lay out a center line on each side of the channel. On this center line lay off the vertical lines for your axle holes. Follow the drawing for your measurements. From the bottom of the channel, 3/16" up on these lines, mark off the drill centers, using a fine prick punch (from 5-and-10c. store). Put a No. 50 drill in the chuck of your drilling machine or headstock of the lathe. Run the drill up to the center mark. Back off the drill and examine the mark. If the drill point comes exactly where you want it, run the No. 50 drill carefully through both sides of the frame. Follow that with an 1/8" dia. drill, and finally with a *new* 3/16" drill. If any of the holes are off center at all, use a new piece of channel instead of trying to file the hole, so that when you slip a piece of 3/16" drill rod through it does not bind.

After you have the holes drilled correctly, cut the frame to the shape shown in the drawing. The hole X in the top of the frame is for your worm gear. Cut it to the size of the one you are going to use. One of the best possible worm gears may be procured from an old phonograph. Take the worm gear off the spindle which holds the records. Lay it aside for future use. We know of several locos. which are giving

service, equipped with phonograph gears.

For OO and HO gages we suggest that you buy one of the motor units already put together at a reasonable cost for these gages. If not, follow the same procedure as set forth, using the smaller dimensions.

Next month we will present the next step in building your engine model.

Dimensions for the F-12

Part	O-gage	OO-gage (4 mm.)	HO-gage
Channel	9⅜"x1"x½"	118 mm.x ¾"x⅜"	4 11/16"x ½"x¼"
L	2⅛"	33.5	1 1/16"
F	2¼"	38.6	1⅛"
Main I	1 11/16"	27.5	27/32"
Frame J	1¼"	19.5	9/16"
K	2"	30.2	1"
C	¼"	4	⅛"
O	1/16"	3/64"	1/32"
N	7/16"	4	7/32"
M	3/16"	2.5	3/32"
X	To fit gear	To fit gear	To fit gear
Wheel A	1 7/16"	23.5	23/32"

Rebuild a Tank Car

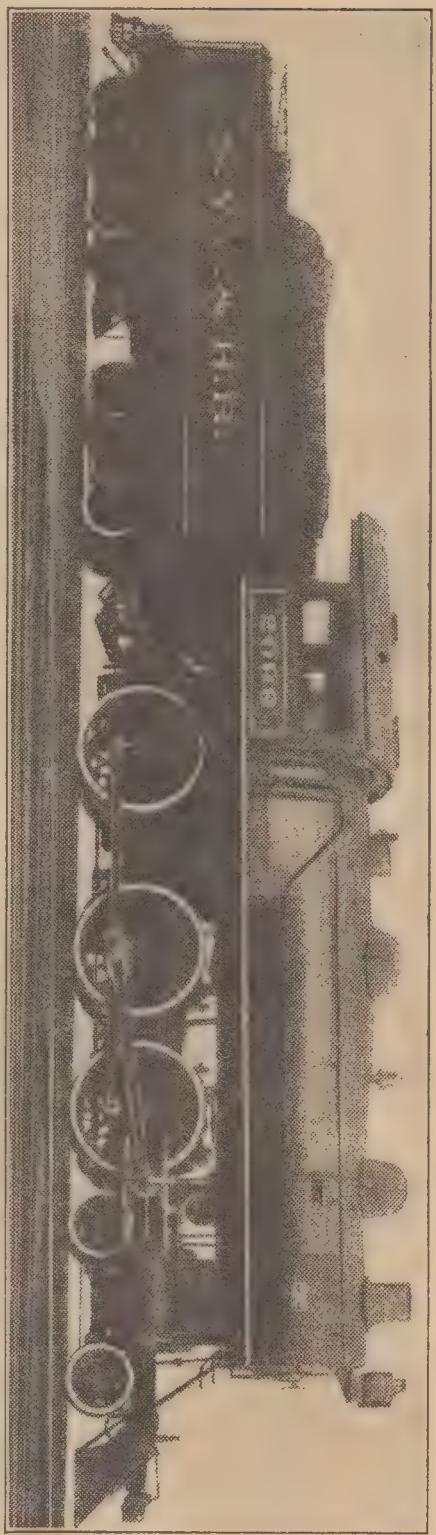
THE oil industry has caused many wars, including the Italian invasion of Ethiopia. Its connection with the railroads of America was pointed out in Jim Holden's article, "The Pipe-Line Fight" (Jan. issue).

In the early '60's, when oil was a new industry, the problem of transporting it by rail was difficult. At first it was shipped in barrels loaded upon flat cars, just like water was shipped in the arid Southwest, but the well-known slack and bumping of freight trains spilled much of the precious liquid. Then someone thought of tank cars.

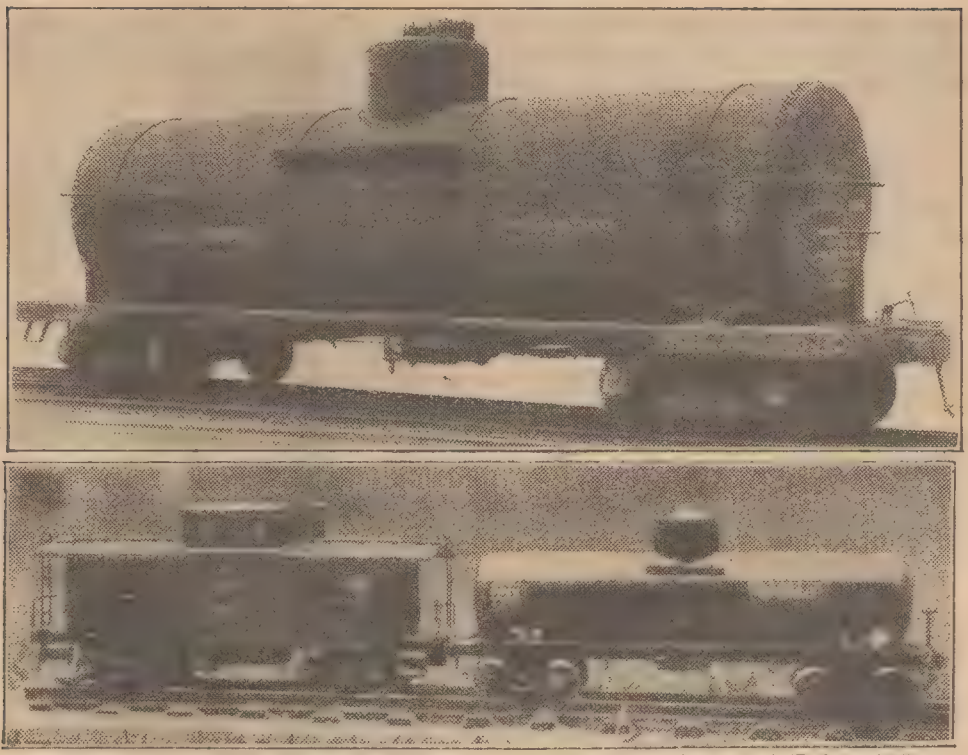
Today such cars carry oil, water, milk, etc.; no model pike is complete without at least one of them. If you have a tinplate tank car and want to rebuild it into almost scale dimensions, the job will cost you about 25c. and at least two hours of time.

First assemble your materials. Scout around for a piece of bristol board ½" wide and no less than 4" long. Cut this in pieces 2" long. From a coffee tin cut a few 1/16" wide strips about 7" long. You need about 6 extra long, thin brads, a good quality, fast-setting cement, 2 couplers, about 1" of 3/16" dia. dowel, teaspoon of crack-filler and some thin paper.

The tinplate car I have is No. 515, standard gage. I took off the 2 brake



Prototype of 4-6-0 Type Loco Which We Are Following in This Series of Articles on Making a Scale Model. The 2099, Built by Alco, Had 22x26" Cylinders, 69" Drivers, 200 Lbs. B. P., 195,000 Lbs. Weight Without Tender, and 31,000 Lbs. T. F.

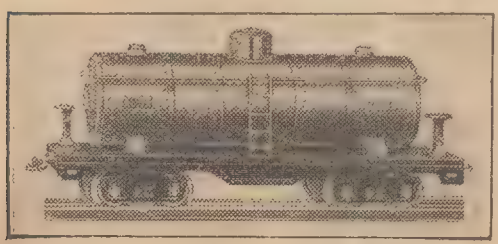


Upper Photo Courtesy of "Railway Age"

(Upper) This Shows You What a Real Tank Car Looks Like; Class ICC-103. (Lower) These Two Models, ¼-Inch Scale, Were Built by E. B. Allison, 28 Summer St., Claremont, N. H., for His New Hampshire Central Pike. Tank Car Took 19 Hours to Build and Cost $2.55. Caboose, 28 Hours, $1.65

wheels, couplers and the 2 small caps on the car top. The indentations left by the caps were filled in with crack-filler and, when dry, sanded to a smooth finish with No. 00 sandpaper. From the dowel I cut 2 pieces ⅜" long. Using a razor blade I shaped them as in the photo of the real car and cemented them on the big cap. Using the tin strips I cut 4 pieces 2⅛" long. These made 2 ladders each ½" wide, and the brads furnished the rungs.

The catwalks just above the ladders are made of 3-ply bristol board ½" by 2".



One of the Lionel Model Tank Cars

These I glued into place, using short pieces of my tin strip to form the braces on the under side. The hand holds on the sides of the tank cap were made from paper clips bent into the form of a wide staple with about ¾" between the legs. I put one on each side of the cap.

Next I pasted small pieces of tracing paper over the nameplates on both sides of the car. The brake wheel minus the tin guard was replaced. With a fine-bladed, 10c. metal saw I cut off the embossed girders. The steps, ½" wide, made of the last piece of tin, were placed at the very ends of the 4 corners of the car.

I made two couplers from a recent article written by Chas. Cunningham. Lastly I gave the car 2 coats of dead black paint and lettered it like a real car. Now I am planning to make trucks of the arch bar type for this car.—Jack Wheeler, 230 E. 207th St, Bronx, N. Y. City.

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Model Engineers and Clubs

NO charge is made for printing news of what the model builders and model clubs are doing "Trading Post" items also are published free.

When writing to any of the names listed here, enclose a self-addressed stamped envelope. Or use a 2c "reply" postal card, which is really 2 one-cent postal cards hinged together. These may be obtained at any post office. You write on one card, leaving the other blank. The fellow who gets your double card tears off the blank one and uses it to send an answer.

* * *

FOR months the operating staff of the Union Connecting Railroad, of the N. Y. Society of Model Engineers, has been busy with improvements for the annual exhibition, which will be held Feb. 7 to 22 at the Society's clubrooms in Knickerbocker Bldg., 152 W. 42nd St., N. Y. C.

In addition to maintenance work on the parts of the system in operation last year, much new construction has been undertaken, chiefly yard facilities. The 300-odd ft. of main-line trackage demand yards capable of supplying many made-up trains. A 3-track passenger yard has been installed. A freight terminal, with a long siding and 2 station tracks, has been built at Tower TU. A new telephone system has been installed, giving separate communication lines between all operating positions, as well as cutting all receivers in on the dispatcher's line.

Last year also was one of the busiest in signal work. A mechanical interlocking machine was installed at Tower DB, and provisions made for one at TU. In several key positions relay devices were installed for signal control of third-rail power. These are being given thorough operating tests. Radical improvements in operation and mechanical facilities will be seen at this year's show. And the boys are getting pretty good with the new timetable.

* * *

ABANDONMENT! The Red River & Central Valley, Redwood Valley Connecting R.R., Sherwood Branch R.R., and the Lakeshore & Western, all O-gage lines under my management, with nearly 300 ft. of rail, are now rusting away into streaks of dust. These lines served the community for 7 yrs., and were abandoned Sept. 15, 1935.—E. H. Nervo, Geyserville, Calif.

(Editor's Note: We're sorry to learn the Nervo lines were abandoned. Why didn't you write us a clever letter about the last run? That would have been a real novelty.)

* * *

OREGON PACIFIC RY., 7105 S.E. Schiller St., Portland, Ore., wants new members to operate the additional motive power.

* * *

MY Union Terminal here has 250 ft. of track, including sidings. There are 4 locos.; 0-1c electric, P-5c electric, Westinghouse Diesel-electric, and a Mikado. Also 12 pieces of rolling stock. I recently finished a Pennsy H-9 for one friend and a B. & O. V-1 for another. Both locos, have working leaf springs which help the traction. The Pennsy handles six 1½-lb. cars up a 6 per cent grade, and the B. & O. 17 cars. Due to constructional troubles, the road grades range from 2 to 6 per cent. I advise model railroaders to avoid grades over 3 per cent.—John Bramble, 7134 Harrison Ave., Swissvale, Pittsburgh, Pa.

(Concluded on next page)

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If you are, you need my 84-page hand book and catalog. It gives complete information on getting started, track laying, signalling, control, etc. Also prices all parts, track, signals, control units, etc. A cyclopedia of data; conversion tables, screw sizes, charts, etc., etc.

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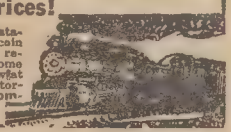

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FLEETWOOD MODEL R.R. CLUB has under construction a ¼" scale system. For details address Bernard Blatt, 1362 College Ave., Bronx, N. Y. City.

* * *

NEW ENGLAND ASS'N OF MODEL RY. SOCIETIES was organized Nov. 10, 1935. The clubs represented totaled 180 members, of which 53 delegates were present. This new organization is doing fine work in establishing standards for model railroaders, uniting the societies and establishing a new, stronger brotherhood of model railroaders.—S. R. Jagger, 10 Blackwood St., Boston, Mass.

Model Trading Post

I OFFER a machine for producing Morse code, also telegraph key and sounder, in exchange for Lionel or A.F. strd.-gage train set.—B. Grenlack, 808 S. 8th St., Council Bluffs, Ia.

* * *

WILL swap my entire model layout for a 2 or 4-cylinder aircraft or motorcycle motor.—J. Wood, 4531 Pulaski Ave., Germantown, Phila., Pa.

* * *

I OFFER strd.-gage equipt. in trade for .22 repeating rifle.—H. Babb, 82 Grove St., Brooklyn, N. Y.

* * *

LIONEL strd.-gage outfit is offered in exchange for O-gage outfit.—A. Hull, Box 432, Bristol, Conn.

* * *

WANTED: ¼" scale locos., cars, equipt., good condition.—L. Massucco, Valley Rd., Box 73, N. Lexington, Mass.

* * *

WHO has O-gage engines or rolling stock to give in exchange for my Shakleigh coasting sled?—H. Webb, Jr., 4241 Aldine, St. Louis, Mo.

* * *

I OFFER 14 pieces of Ives track, one pr. O-gage switches and box car in trade for Meccano parts.—W. Novak, 314 Nelson Ave., Saratoga Springs, N. Y.

* * *

WANTED: Strd.-gage locos and cars.—W. Graves, Winston-Salem, N. C.

* * *

WILL trade my Dorfan loco. No. 770 or Ives 1120-R for Lionel 259-E loco.—A. Weinman, 94 Sylvester St., Rochester, N. Y.

* * *

I OFFER 2 pairs Wilson No. 4 boxing gloves or banjo in exchange for O-gage rolling stock.—J. Layouros, Lehigh Univ. Cafe, Bethlehem, Pa.

* * *

I AM a cripple in both legs and deaf. Will anyone give me an electric loco., cars or track in O-gage in exchange for which I will paint him a good picture on glass and frame it? I need the model equipt. to earn a living with.—E. Petch, 3318 W. 61st St., Cleveland, O.

* * *

I HAVE the first seven kits of the "Scale-Craft" K-4 in good condition. What am I offered?—E. Leo, 2451 Catherine Rd., Pasadena, Calif.

* * *

WANTED: ¼" scale loco., cars, track. I offer A or B eliminators, etc.—F. Nienow, Nashotah, Wis.

* * *

HAVE electric model-making lathe and 10-inch band saw to swap for what have you.—M. Ottaway, 43 River St., Sidney, N. Y.

* * *

WANTED: 3000 and 3380 series pass. cars, also other O-gage rolling stock.—B. Jordan, 1411 N. 27th St., Waco, Texas.

* * *

WILL exchange my steam type loco. and tender, oil car, caboose, ob. car and 20 section straight track, all O-gage A. F., for Lionel O-gage or what have you?—J. Nail, China Springs, Texas.

* * *

I OFFER complete set of 8 "Ralph on the Engine" books, good condition, for 2 strd.-gage frt. cars.—G. A. Janvrin, Hampton Falls, N. H.

WILL trade 12 company diagrams of various locos. for best offers in tinplate or photos.—P. Corbin, Box 74, New Market, Ia.

* * *

I OFFER Lionel O-gage outfit and camera for what have you?—E. Burton, 1347 Maple View Pl., S. E., Washington, D. C.

* * *

WANTED: Small jeweler's or model-maker's lathe, drill press, small hand tools, HO-gage equipt. I offer new 20-gage L. C. Smith 2-barrel shotgun, .32 Winchester rifle, fair condition, 100 power microscope and B.S.A. camping equipt.—Chas. G. Cunningham, (Model Railroading dept. editor), Home address, 2899 Kingsbridge Terrace, Bronx, N. Y. City.

* * *

WILL trade 15 back issues of "Railroad Stories" and model-making magazines for O-gage reversible, steam outline loco.—F. Burkhardt, LaBolt, S. D.

* * *

I WANT to buy Lionel No. Cp 21 strd.-gage couplers.—E. Middleton, 239 W. Adams St., Los Angeles.

* * *

WHAT am I offered for combination mail and express cars, etc., suitable for Buddly L outfits?—L. Arend, 729 S. Front St., Franklin, O.

* * *

WILL trade my 15 reels of 35 mm. film, Alto sax. and telegraph key for complete railroad.—D. Brown, Batavia, Ia.

* * *

I OFFER "Railroad Stories" from 1929 to present issue, also train orders and timetables. Want model equipt.—F. Gardiner, 770 48th St., Brooklyn, N. Y.

* * *

WHAT offers for my complete Lionel strd.-gage outfit?—J. McCaskey, Jr., 1212 S. Wilton St., Philadelphia, Pa.

* * *

WHO will give me O-gage track in exchange for my air rifle, banjo uke, baseball shoes, football pants?—W. Shoup, 2 Prospect St., Adams, N. Y.

* * *

WILL trade O-gage tinplate engines for A. F. 3000 series or Ives 130 series pass. cars.—J. Condey, 5329 Skillman Ave., Woodside, N. Y.

* * *

I NEED Lionel strd.-gage street cars, summer or interurban, also extra motor trucks to fit them.—W. Cooke, Swedesboro, N. J.

* * *

WANTED: Dorfan 4-4-0 locos. Will exchange ¼" scale equipt. with any reader living near me.—L. Allen, 209 Oglesby St., Salem, Ill.

* * *

I HAVE science magazines to trade for "Lionel Magazine," Vols. 1 to 8.—D. Jordan, 154 Hawthorne St., Glen Ridge, N. J.

* * *

WILL trade my strd.-gage equipt. for trolley cars.—W. Wright, 26 E. 20th St., Paterson, N. J.

* * *

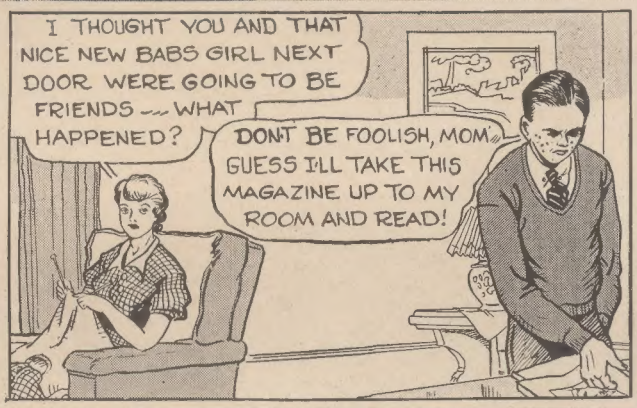
WANT Lionel O-gage equipt. I have sides and ends of P.R.R. 50-ton, ¼" scale car with the lettering and heralds already painted.—A. Ledener, 2808 35th St., Long Island City, N. Y.

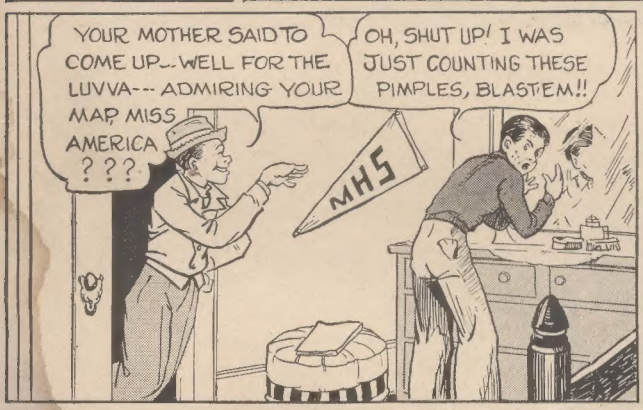
* * *

WILL trade Radiola No. 2 experimental set for O-gage model equipt.—J. O'Dell, First St., W. Elizabeth, Pa.

"THE FIRST GIRL I EVER LIKED — and these Pimples had to come!"

But it wasn't too late, Ben found, to mend the trouble


I THOUGHT YOU AND THAT NICE NEW BABS GIRL NEXT DOOR WERE GOING TO BE FRIENDS — WHAT HAPPENED?
DON'T BE FOOLISH, MOM — GUESS I'LL TAKE THIS MAGAZINE UP TO MY ROOM AND READ!


YOUR MOTHER SAID TO COME UP — WELL FOR THE LUVVA — ADMIRING YOUR MAP, MISS AMERICA ???
OH, SHUT UP! I WAS JUST COUNTING THESE PIMPLES, BLAST 'EM!!
MHS

DOES SEEM TO BE A LOT OF 'EM — SAY, YOU KNOW MY COUSIN RAY — HE TOOK FLEISCHMANN'S YEAST FOR HIS PIMPLES — WIPED 'EM RIGHT OFF THE OLD PHIZ
FLEISCHMANN'S YEAST DID THAT? SAY, LEAD ME TO IT!

THREE WEEKS LATER
BABS, GO TO THE SCHOOL DANCE WITH ME NEXT SATURDAY?
WHY, I SORT OF HAD A DATE, BUT — YES, I'D LOVE TO!
GOSH, I'M GLAD I GOT RID OF THOSE PIMPLES!

Don't let adolescent pimples make YOU hide away!

Between the ages 13 and 25, important glands develop. This causes disturbances throughout the body. Waste poisons in the blood irritate the skin, causing pimples.

In treating adolescent pimples, doctors prescribe Fleischmann's Yeast. This fresh yeast clears the blood of skin irritants that cause pimples. Then the pimples disappear. Eat Fleischmann's Yeast 3 times a day, before meals, until skin clears.

—clears the skin

by clearing skin irritants out of the blood

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"GET A LIFT WITH A CAMEL"

THE TOWERS OF MANHATTAN from a new angle—New York's new Triborough Bridge. In the foreground: Howard Hougland, wearing the picturesque engineers' "hard hat." "An engineer's life is packed with action," he says. "When my pep is at low ebb, there is nothing like a Camel. I always get a 'lift' with a Camel. I also prefer Camel's good taste."

"I AM A STEEL WORKER on the Triborough Bridge," says Ben Parsons (*above*). "When tired, I get a 'lift' with a Camel."

WINTER SPORTS TAKE ENERGY TOO. Says Margaret Lynam (*left*): "When I feel exhausted from a long day outdoors, Camels renew my flow of energy."

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